

Annual 2005 Groundwater Monitoring Report

**Arcata Redwood Company (Former)
Smith River Sawmill
Smith River, California
Case No. 1TDN007**

Prepared for:

Arcata Redwood Company, LLC



Consulting Engineers & Geologists, Inc.

812 W. Wabash Avenue
Eureka, CA 95501-2138
707/441-8855

January 2006
093047



CONSULTING ENGINEERS & GEOLOGISTS, INC.

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Reference: 093047

January 19, 2006

Mr. Cody Walker
California Regional Water Quality
Control Board, North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403

**Subject: Annual 2005 Groundwater Monitoring Report, Arcata Redwood Company
(Former) Smith River Sawmill, Smith River, California; Case No. 1TDN007**

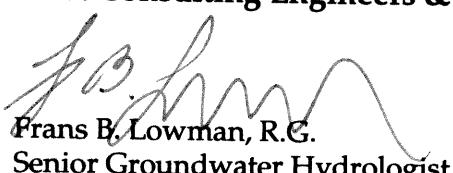
Dear Mr. Walker:

This annual 2005 groundwater monitoring report is being submitted by SHN Consulting Engineers & Geologists, Inc., (SHN) on behalf and with the approval of Arcata Redwood Company, LLC, in accordance with the California Regional Water Quality Control Board, North Coast Region's reporting requirements.

If you have questions or comments, please call me at 707/441-8855.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.



Frans B. Lowman, R.G.
Senior Groundwater Hydrologist

FBL/SLD:med:ap

Attachment: Report

copy w/attach: Nancy Cloward, Arcata Redwood Company, LLC
Galen Schuler, Esq., Representative for Arcata Redwood Company, LLC

Reference: 093047

Annual 2005 Groundwater Monitoring Report

**Arcata Redwood Company (Former)
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Prepared for:

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Prepared by:


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812 W. Wabash Avenue
Eureka, CA 95501-2138
707/441-8855

January 2006



QA/QC: JJA____

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Abbreviations and Acronyms

<	Denotes a value that is "less than" the method detection limit.
mV	millivolts
ppm	parts per million
ug/L	micrograms per Liter
vs.	versus
AVOC	Aromatic Volatile Organic Compound
BTEX	Benzene, Toluene, Ethylbenzene, and total Xylenes
DCO ₂	Dissolved Carbon Dioxide
DO	Dissolved Oxygen
EC	Electrical Conductivity
EPA	U.S. Environmental Protection Agency
HVOC	Halogenated Volatile Organic Compound
MSL	Mean Sea Level
MTBE	Methyl Tertiary-Butyl Ether
MW	Monitoring Well
NA	Not Analyzed
ND	Not Detected
ORP	Oxidation-Reduction Potential
RWQCB	California Regional Water Quality Control Board, North Coast Region
SHN	SHN Consulting Engineers & Geologists, Inc.
TPHD	Total Petroleum Hydrocarbons as Diesel
TPHG	Total Petroleum Hydrocarbons as Gasoline
TPHMO	Total Petroleum Hydrocarbons as Motor Oil
WP	Well Point

1.0 Introduction

This report presents the results of groundwater monitoring activities for the second half of 2005, conducted at the former Arcata Redwood Company, Smith River Sawmill (Case No. 1TDN007). This report was submitted by SHN Consulting Engineers & Geologists, Inc. (SHN), on behalf and with the approval of Arcata Redwood Company, LLC, in accordance with the California Regional Water Quality Control Board, North Coast Region's (RWQCB) reporting requirements. SHN completed groundwater monitoring on November 1, 2005. A site location map is presented as Figure 1.

This report is presented in 5 sections. This section introduces the reader to the site. Section 2.0 discusses the scope of work completed at the site during the second semi-annual groundwater-monitoring event of 2005. Section 3.0 presents the results of the groundwater-monitoring program. Section 4.0 presents conclusions for the site, as well as recommendations for future activities. Section 5.0 presents references cited.

2.0 Field Activities

2.1 Monitoring Well Sampling

SHN conducted groundwater monitoring on November 1, 2005. As part of the monitoring program, all but one of the 26 existing groundwater-monitoring wells were measured for depth to water. Well MW-6 has been damaged and could not be measured. Monitoring wells MW-19, MW-21, and MW-22, and well points WP-1 through WP-3, were subsequently purged and sampled during this monitoring event. The remaining groundwater monitoring wells were not sampled. Figure 2 shows monitoring well locations.

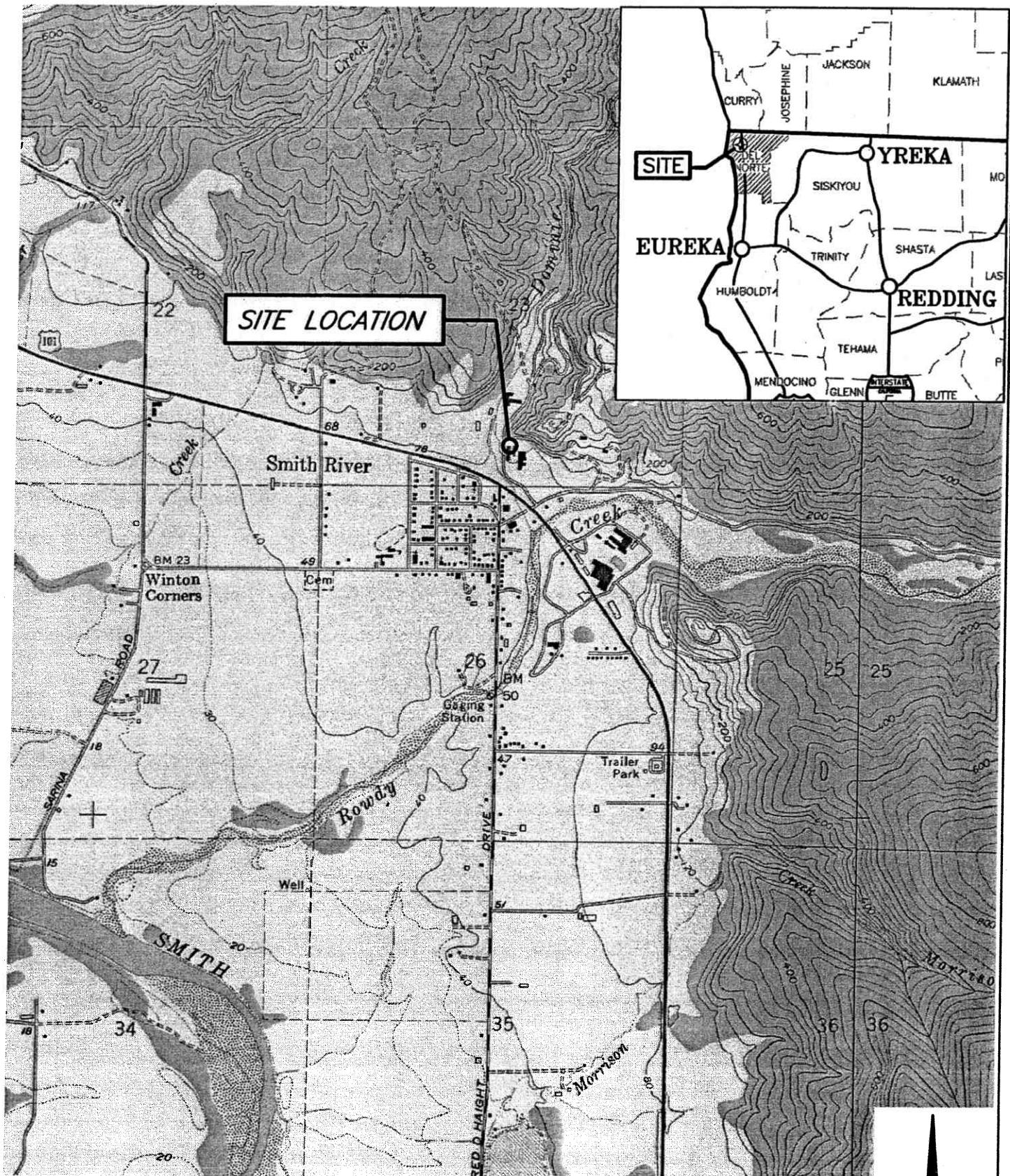
Prior to purging, monitoring wells MW-19, MW-21, and MW-22 were measured for depth to water, and checked for the presence of free product (none was observed). Electrical Conductivity (EC), pH, and temperature were monitored periodically during purging activities using portable instrumentation. Monitoring wells MW-7 and MW-19, and the 3 well points, were measured for Dissolved Oxygen (DO), Oxidation-Reduction Potential (ORP), and Dissolved Carbon Dioxide (DCO₂).

A groundwater sample was then collected from monitoring wells MW-19, MW-21, and MW-22, and well points WP-1, WP-2, and WP-3, directly from the peristaltic pump dedicated discharge tubing. The water samples were immediately placed in an ice-filled cooler and submitted to the laboratory for analyses under appropriate chain-of-custody. Field notes and water sampling data sheets from the November 1, 2005, monitoring event are included in Appendix A.

2.2 Laboratory Analysis

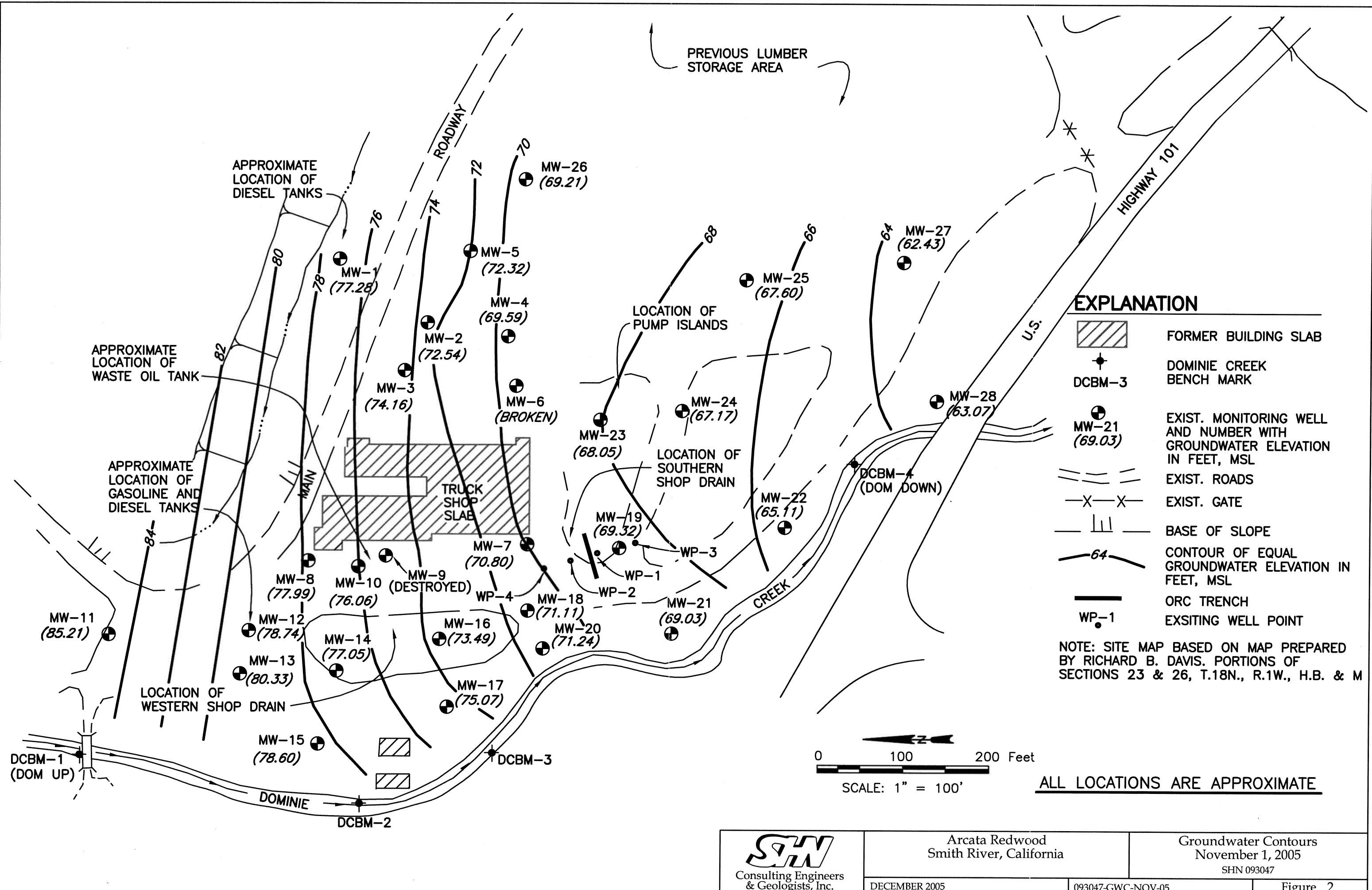
Each groundwater sample was analyzed for one or more of the following constituents:

- Total Petroleum Hydrocarbons as Diesel and Motor Oil (TPHD/TPHMO), in general accordance with U.S. Environmental Protection Agency (EPA) Method Nos. 3510/GCFID/8015B.
- Total Petroleum Hydrocarbons as Gasoline (TPHG), in general accordance with EPA Method Nos. 5030/GCFID/8015B.



SOURCE: SMITH RIVER
USGS 7.5 MINUTE
QUADRANGLE

1"=2000' \pm



- Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), and Methyl Tertiary-Butyl Ether (MTBE), in general accordance with EPA Method Nos. 5030/8021B.

The groundwater sample from monitoring well MW-19 was also analyzed for Halogenated Volatile Organic Compounds (HVOCs), and Aromatic Volatile Organic Compounds (AVOCs), in general accordance with EPA Method No. 8021B.

North Coast Laboratories, Ltd., a California State-certified analytical laboratory located in Arcata, California, performed all analyses.

2.3 Equipment Decontamination Procedures

All well purging and sampling equipment was cleaned prior to being transported to the site. All smaller equipment was initially washed in a water solution containing Liquinox® cleaner, followed by a distilled water rinse, then by a second distilled water rinse.

2.4 Investigation-Derived Waste Management

All rinse water utilized for decontaminating field-sampling equipment, and the well purge water, was temporarily stored on site in 5-gallon plastic buckets and 50-gallon plastic drums. The water was then transported to SHN's 1,000-gallon purge water storage tank located at 812 West Wabash Avenue in Eureka, California. Approximately 66 gallons of decontamination and purge water from the November 1, 2005, monitoring event are being stored at SHN, and will be discharged, under permit, to the City of Eureka municipal sewer system. A discharge receipt will be included in the next groundwater monitoring report. Appendix A in this report contains the discharge receipt for the 77 gallons of water generated from the January 2005 monitoring event.

3.0 Groundwater Monitoring Results

3.1 Hydrogeology

SHN measured depth-to-groundwater in all accessible monitoring wells during the 2005, semi-annual monitoring event (Table 1). On November 1, 2005, the groundwater flow beneath the site was to the south/southeast, with an approximate gradient of 0.022. A groundwater contour map is presented as Figure 2. The groundwater flow configuration for the site has historically been consistent.

Table 1
Groundwater Elevations, November 1, 2005
Arcata Redwood Company; Smith River, California

Sample Location	Top of Casing Elevation (feet MSL) ¹	Depth to Groundwater (feet) ²	Groundwater Elevation (feet MSL)
MW-1	90.00	12.72	77.28
MW-2	89.44	16.90	72.54
MW-3	88.59	14.43	74.16
MW-4	87.13	17.54	69.59
MW-5	87.13	14.81	72.32
MW-7	85.35	14.55	70.80
MW-8	91.34	13.35	77.99
MW-10	89.73	13.67	76.06
MW-11	90.62	5.41	85.21
MW-12	90.59	11.85	78.74
MW-13	88.92	8.59	80.33
MW-14	86.61	9.56	77.05
MW-15	86.69	8.09	78.60
MW-16	85.58	12.09	73.49
MW-17	85.04	9.97	75.07
MW-18	82.63	11.52	71.11
MW-19	80.08	10.76	69.32
MW-20	82.74	11.50	71.24
MW-21	79.69	10.66	69.03
MW-22	79.40	14.29	65.11
MW-23	84.18	16.13	68.05
MW-24	82.03	14.86	67.17
MW-25	79.56	11.96	67.60
MW-26	83.92	14.71	69.21
MW-27	76.40	13.97	62.43
MW-28	82.61	19.54	63.07

1. MSL: Mean Sea Level

2. Below top of casing

3.2 Groundwater Analytical Results

The laboratory analytical results from the November 1, 2005, groundwater-monitoring event are summarized in Table 2. TPHG was detected in the groundwater samples collected from well points WP-1, WP-2, and WP-3, and monitoring well MW-19, at concentrations ranging from 260 micrograms per Liter (ug/L) in well point WP-3, to 42,000 ug/L in well point WP-2. TPHD was present in the groundwater samples well points WP-1 and WP-2, and monitoring wells MW-4, MW-19, and MW-22, at concentrations ranging from 57 ug/L in well MW-22, to 2,600 ug/L in well point WP-2. Detectable concentrations of toluene, ethylbenzene, and total xylenes were present in the groundwater samples collected from well points WP-1 and WP-2, and well MW-19. Detectable concentrations of total xylenes were identified in the groundwater samples from all 3 well points and monitoring well MW-19. MTBE

was not detected in any of the groundwater samples collected during this monitoring event. TPHMO was detected in well points WP-1 and WP-2. Historically, TPHMO has only been detected in the well points on an occasional basis. No HVOCs or any other AVOCs were present above the laboratory method detection limits in the water sample collected from well MW-19.

The complete laboratory analytical report and corresponding chain-of-custody documentation from the November 1, 2005, groundwater-monitoring event are included in Appendix C. Historic groundwater analytical data are presented in Appendix B, Tables B-1 and B-2.

Table 2
Groundwater Analytical Results, November 1, 2005
Arcata Redwood Company, Smith River, California
(in ug/L)¹

Sample Location	TPHG ²	TPHD ³	TPHMO ⁴	B ⁵	T ⁵	E ⁵	X ⁵	MTBE ⁶	VOCs ⁷
WP-1	16,000⁸	990⁹	250	<0.50 ¹⁰	<0.50	0.68	224.6	<3.0	NA ¹¹
WP-2	42,000⁸	2,600⁹	1,100	<0.50	0.84	2.2	809	<3.0	NA
WP-3	260⁸	<50	<170	<0.50	<0.50	<0.50	3.2	<3.0	NA
MW-4	NA	95	NA	NA	NA	NA	NA	NA	NA
MW-7	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	<3.0	NA
MW-19	1,700⁸	320⁹	NA	<0.50	<0.50	<0.50	51.73¹²	<3.0	ND ¹³
MW-21	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	<3.0	NA
MW-22	<50	57	NA	<0.50	<0.50	<0.50	<0.50	<3.0	NA

1. ug/L: micrograms per Liter

2. TPHG: Total Petroleum Hydrocarbons as Gasoline, analyzed in general accordance with U.S. Environmental Protection Agency (EPA) Method Nos. 5030/GCFID/8015B.

3. TPHD: Total Petroleum Hydrocarbons as Diesel, analyzed in general accordance with EPA Method Nos. 3510/GCFID/8015B.

4. TPHMO: Total Petroleum Hydrocarbons as Motor Oil, analyzed in general accordance with EPA Method Nos. 3510/GCFID/8015B.

5. BTEX: Benzene, Toluene, Ethylbenzene, and total Xylenes, analyzed in general accordance with EPA Method Nos. 5030/8021B.

6. MTBE: Methyl Tertiary-Butyl Ether, analyzed in general accordance with EPA Method Nos. 5030 / 8021B.

7. VOCs: Volatile Organic Compounds, analyzed in general accordance with EPA Method No. 8021B. See laboratory analytical report for constituent list and method detection limits.

8. The gasoline value includes the reported gasoline components, in addition to other peaks in the gasoline range.

9. Sample contains some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. Sample also contains material similar to degraded or weathered diesel oil.

10. <: Denotes a value that is "less than" the laboratory method detection limit.

11. NA: Not Analyzed

12. Total Xylenes result from Aromatic Volatile Organic analytical results.

13. ND: Not Detected

Figure 3 presents TPHG concentrations over time in wells MW-19 and MW-22. TPHG concentrations in well MW-19 have an overall decreasing trend with seasonal variations. TPHG concentrations in well MW-22 continue to be very low, with periodic monitoring events where TPHG is not detected.

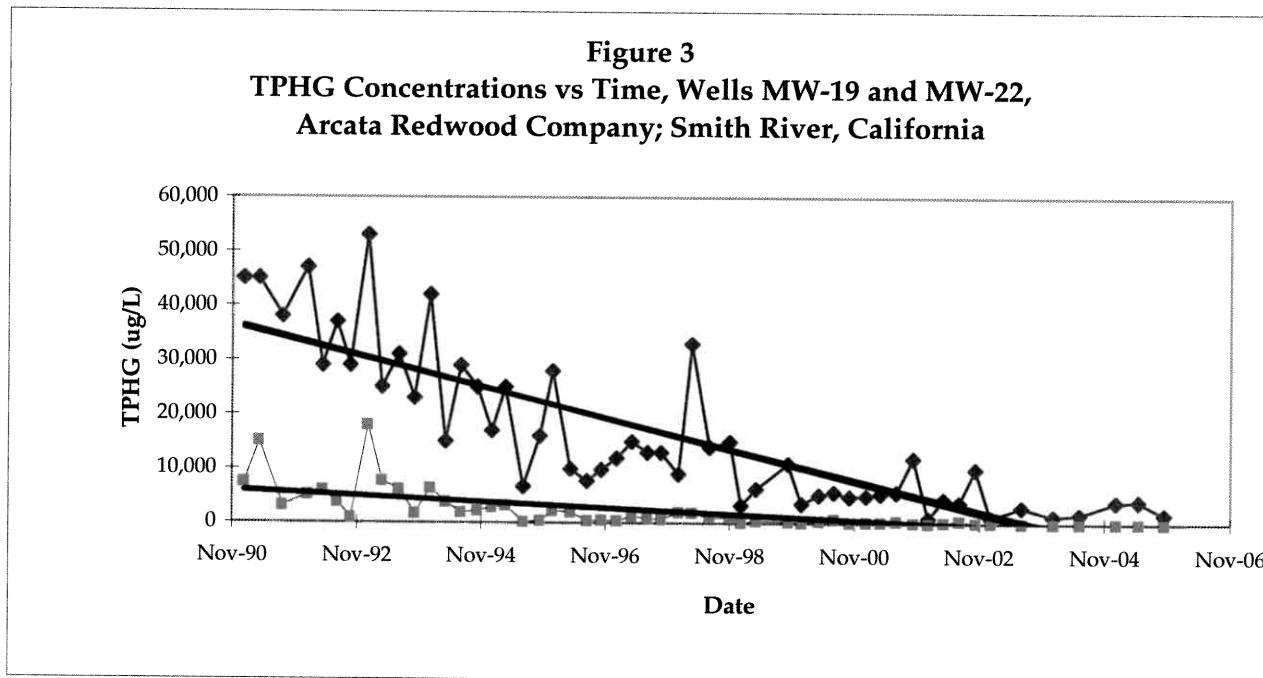


Figure 4 presents TPHG concentration over time in well points WP-1, WP-2, and WP-3. Well point WP-2 is the most upgradient of the 3 well points and well point WP-4 is the most downgradient of the 3 well points. As shown in Figure 4, the following trends are present:

- The highest TPHG concentrations are present in well point WP-2 (upgradient well point) along with the slightest decreasing concentration trend when compared to well points WP-1 and WP-3.
- TPHG concentrations in well point WP-1 (midpoint) are lower than those found in well point WP-2, and well point WP-1 has a steeper decreasing concentration trend.
- TPHG concentrations in well point WP-3 (downgradient well point) are the lowest of the 3 well points, with a TPHG decreasing concentration trend similar to that observed in well point WP-1.

The TPHG concentrations and associated trends observed in well points WP-1, WP-2, and WP-3 indicate that the center of the TPHG plume is in the area around well point WP-2, and that the TPHG plume is degrading in the downgradient direction.

Figure 4
TPHG Concentrations vs Time, Well Points WP-1 Through WP-3
Arcata Redwood Company; Smith River, California

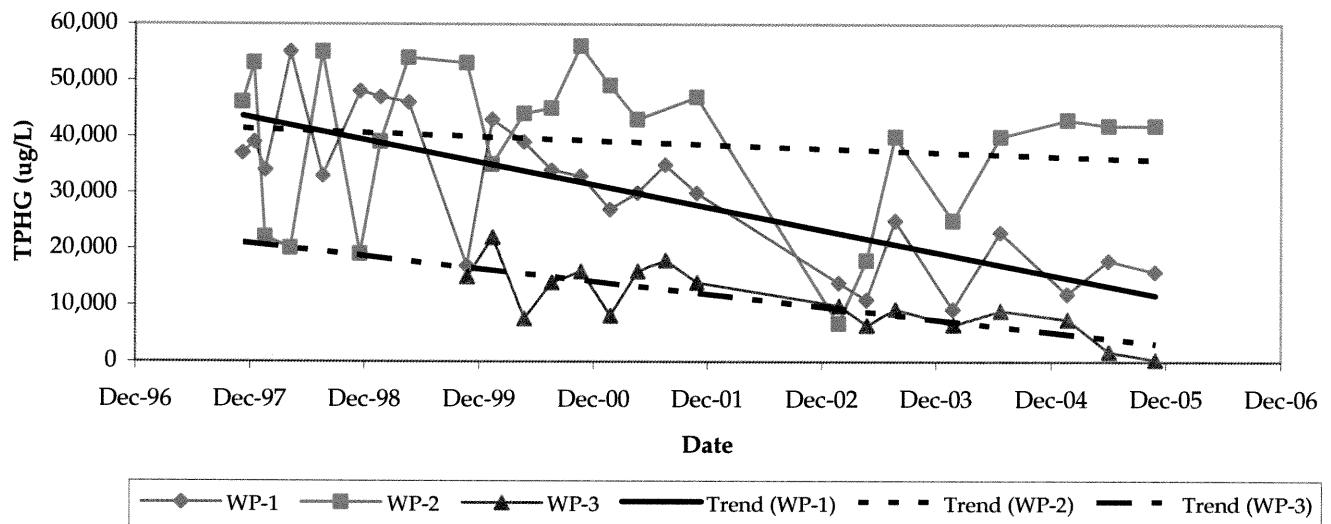
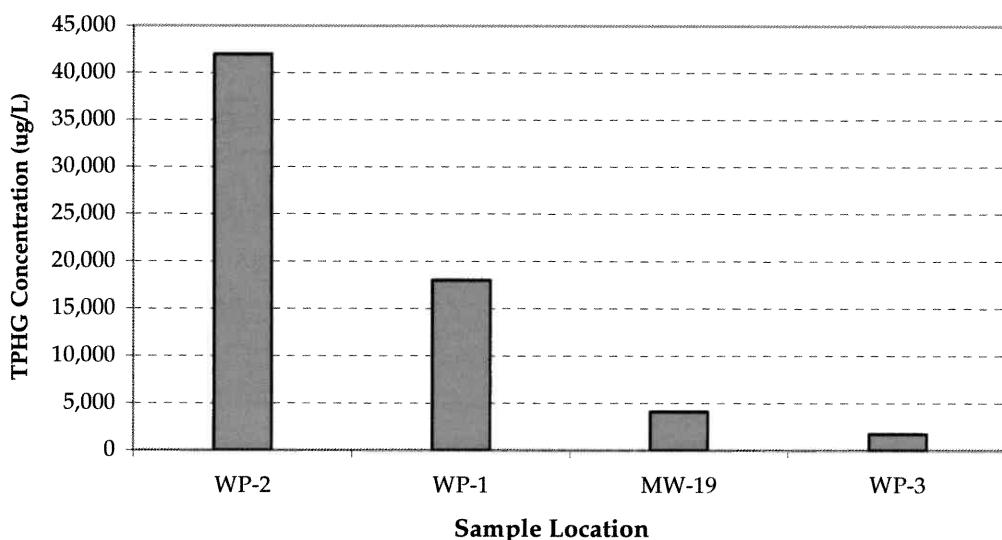


Figure 5 presents the TPHG concentration trend through the contaminated plume, from the plume midpoint (well point WP-2) to the downgradient portion (well point WP-3). There is a significant decrease in TPHG concentrations when comparing the downgradient concentrations to midpoint concentrations, which further supports the idea that the TPHG plume is degrading.

Figure 5
TPHG Concentration Cross-Section, Area III
Arcata Redwood Company; Smith River, California



3.3 Natural Attenuation Parameters

DO, DCO₂, and ORP were measured in well points WP-1 through WP-3, and monitoring wells MW-7 and MW-19, prior to sampling, and are summarized in Table 3.

During the November 1, 2005, monitoring event, DO concentrations ranged from 1.08 parts per million (ppm) in well MW-19, to 4.98 ppm in well point WP-3. DCO₂ concentrations ranged from 10 ppm in well point WP-3, to 180 ppm in well point WP-1. ORP measurements ranged from -88 millivolts (mV) in monitoring well WP-1, to 245 mV in well point MW-7. The natural attenuation measurements collected during this monitoring event indicate that mildly aerobic conditions exist beneath the site, and that biodegradation is occurring.

Table 3 Natural Attenuation Parameters, November 1, 2005 Arcata Redwood Company (Former), Smith River, California			
Sample Location	DO ¹ (ppm) ²	DCO ₂ ³ (ppm)	ORP ⁴ (mV) ⁵
WP-1	1.12	180	-88
WP-2	1.11	120	-46
WP-3	4.98	10	72
MW-7	1.60	110	245
MW-19	1.08	100	233

1. DO: Dissolved Oxygen, field measured using portable instrumentation.
 2. ppm: Measurement concentration, in parts per million.
 3. DCO₂: Dissolved Carbon Dioxide, field measured using a field test kit.
 4. ORP: Oxidation-Reduction Potential, field measured using portable instrumentation.
 5. mV: millivolts

When evaluating intrinsic bioremediation, it is useful to compare groundwater parameters collected within the contaminant plume to groundwater parameters collected from outside the contaminant plume. The groundwater analytical results from this monitoring event indicate that a petroleum hydrocarbon plume is present in the area of well point WP-2. It is assumed that groundwater collected from well MW-7 is representative of background conditions. For this evaluation, well point WP-2 (source area) and well MW-7 (background conditions) were used. As shown in Table 4, all 4 indicators follow the trend that would be expected when biodegradation is occurring.

Table 4 Intrinsic Bioremediation Indicator Comparison, November 1, 2005 Branscomb Store; Branscomb, California					
Groundwater Bioremediation Parameter	Units	Expected Trend for Source Well Related to Background	Source Area WP-2	Background Well MW-7	Consistent with Trend
TPHG ¹ Concentration	ug/L ²	Increases	42,000	<50 ³	Yes
Dissolved Oxygen	ppm ⁴	Decreases	1.11	1.60	Yes
Dissolved Carbon Dioxide	ppm	Increases	120	110	Yes
Oxidation-Reduction Potential	mV ⁵	Decreases	-46	245	Yes

1. TPHG: Total Petroleum Hydrocarbons as Gasoline
 2. ug/L: micrograms per Liter
 3. <: denotes a value "less than" the Method Detection Limit
 4. ppm: parts per million
 5. mV: millivolts

4.0 Discussion and Recommendations

TPHG is present in the area of well points WP-1, WP-2, and WP-3, and monitoring well MW-19 (Area 3). The analytical results of groundwater samples collected from Area 3 indicate that petroleum hydrocarbon concentrations continue to decrease over time. Additionally, the general decrease in TPHG concentrations in the downgradient direction (Figure 5) indicates that natural attenuation is occurring in this area. The TPHD plume present in Area 3 has been following a similar decreasing concentration trend as TPHG.

The groundwater elevations measured during this monitoring event were generally consistent with those reported during the January 2005, groundwater monitoring event. The groundwater flow direction during the November 1, 2005, monitoring event was to the south/southeast, and has remained consistent with historic flow patterns.

Groundwater monitoring was conducted at the site on a quarterly basis from January 1991 through December 2003. With the approval of the RWQCB, the monitoring frequency was reduced to a semi-annual event beginning in 2004. Petroleum hydrocarbon concentrations have generally shown a continual decreasing trend since the inception of groundwater monitoring, indicating that the petroleum hydrocarbons present are decreasing as a result of biodegradation. Groundwater elevation data collected from the site have demonstrated that the direction of groundwater flow does not change due to seasonal groundwater fluctuations.

SHN will continue semi-annual monitoring as required by the RWQCB. The next semi-annual monitoring event is scheduled to occur in June 2006.

5.0 References Cited

California Regional Water Quality Control Board, North Coast Region. (December 1, 2003). "*Arcata Redwood Company (Former) Smith River Sawmill, Smith River, California.*" Santa Rosa: RWQCB.

SHN Consulting Engineers & Geologists, Inc. (April 8, 2003). *First Quarter 2003 Groundwater Monitoring Report and Request for Closure, Arcata Redwood Company (Former) Smith River Sawmill, Smith River, California.* Eureka: SHN.

Appendix A
Field Notes



CONSULTING ENGINEERS & GEOLOGISTS, INC.

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DAILY FIELD REPORT

JOB NO 093047

Page of

PROJECT NAME <i>Smith River</i>	CLIENT/OWNER <i>Green Diamond Resource Co.</i>	DAILY FIELD REPORT SEQUENCE NO	
GENERAL LOCATION OF WORK <i>Smith River, CA</i>	OWNER/CLIENT REPRESENTATIVE <i>Jeff F. Lane</i>	DATE <i>11/1/05</i>	DAY OF WEEK <i>Tue</i>
TYPE OF WORK <i>Semi-annual sampling</i>	WEATHER	PROJECT ENGINEER/ SUPERVISOR <i>Frans Lowman</i>	
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN <i>Dustin Tildes</i>	

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

0838	On site.	
0930	Taking water levels	
1034	Purging MW-4 with dedicated pump. All purge water was caught in 5gal buckets.	MW-4
1105	Sampled MW-4 Locked up well.	
1118	Purging MW-7 with dedicated pump. All purge water was caught in 5gal buckets.	
1133	Purging WP-3 with pump. All purge water was caught in 5gal buckets	
1200	Sampled WP-3	WP-3
1200	Sampled MW-7 Locked up well	MW-7
1223	Purging MW-19 with dedicated pump. All purge water was caught in 5gal buckets.	
1305	Sampled MW-19 Locked up well	MW-19
1315	Purging MW-21	
1345	Sampled MW-21 Locked up well	MW-21
1255	Sampled WP-1	WP-1
1355	Sampled WP-2	WP-2
1358	Purging MW-22 with its dedicated pump. All purge water was caught in 5gal buckets.	
1425	Sampled MW-22 Locked up well.	MW-22
1430	Cleaned and loaded up	
1438	Off site.	
1233	Purging WP-1 with peristaltic pump. All purge water was caught in 5gal buckets.	
1312	Purging WP-2 with peristaltic pump. All purge water was caught in 5gal buckets.	

COPY GIVEN TO:

REPORTED BY

Dustin Tildes



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DAILY FIELD REPORT

JOB NO 093047

Page of

PROJECT NAME <i>Smith River</i>	CLIENT/OWNER <i>Green Diamond Resource Co.</i>	DAILY FIELD REPORT SEQUENCE NO	
GENERAL LOCATION OF WORK <i>Smith River, CA</i>	OWNER/CLIENT REPRESENTATIVE <i>Jeff Lane</i>	DATE <i>11/1/05</i>	DAY OF WEEK <i>Tue</i>
TYPE OF WORK <i>Semi-annual sampling</i>	WEATHER <i>Rain</i>	PROJECT ENGINEER/ SUPERVISOR <i>Frans Lowman</i>	
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN <i>Dustin Tibbetts</i>	

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

Only MW-4, WP-3, MW-7, MW-19, MW-21, WP-1, WP-2 & MW-22 were purged and sampled.



EQUIPMENT CALIBRATION SHEET

Name:	<u>Dustin Tibbets</u>			
Project Name:	<u>Smith River</u>			
Reference No.:	<u>093047</u>			
Date:	<u>11/1/05</u>			
Equipment:	<input checked="" type="checkbox"/> pH & EC <input type="checkbox"/> PID <input type="checkbox"/> GTCO ₂ <input type="checkbox"/> GTTEL <input type="checkbox"/> Turbidity <input checked="" type="checkbox"/> Other <u>Dissolved Oxygen Meter</u>			

Description of Calibration Procedure and Results:

pH + EC meter calibrated using a 2 buffer method
with a pH 7.00 and 4.01, meter was set exactly to
7.00 and 4.01 and conductivity was set at 700 umhos.

DO meter is self calibrating with the
Altimeter set at 0



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Groundwater Elevations

Job No.:	093047	Name:	
Client:	ARCATA REDWOOD COMPANY	Date:	11/11/05
Location:	SMITH RIVER, CA	Weather:	Rain
Sample Location	Time of Reading	Top of Casing Elevation (feet)	Depth To Water (feet)
MW-1	0951	90.00	12.72
MW-2	0950	89.44	16.90
MW-3	0953	88.59	14.43
MW-4	0948	87.13	17.54
MW-5	0943	87.13	14.81
MW-6	—	86.38	Braken
MW-7	1019	85.35	14.55
MW-8	1000	91.34	13.35
MW-10	1002	89.73	13.67
MW-11	0955	90.62	5.41
MW-12	1000	90.59	11.95
MW-13	1007	88.92	8.57
MW-14	1005	86.61	9.56
MW-15	1003	86.69	8.09
MW-16	1007	85.58	12.09
MW-17	1012	85.04	9.97
MW-18	1016	82.63	11.52
MW-19	1023	80.08	10.76
MW-20	1012	82.74	11.50
MW-21	1027	79.69	10.66
MW-22	1019	79.40	14.29
MW-23	0943	84.18	16.13
MW-24	0937	82.03	14.86
MW-25	0940	79.56	11.96
MW-26	0942	83.92	14.71
MW-27	0935	76.40	13.87
MW-28	0932	82.61	19.54



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Water Sampling Data Sheet

Project Name:	<u>Smith River</u>	Date/Time:	<u>11-1-05</u>
Project No.:	<u>093047</u>	Sampler Name:	<u>David R Parry</u>
Location:	<u>Smith River, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>WP-1</u>	Weather:	<u>Raining</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>No</u>

Total Well Depth (feet)	- Initial Depth to Water (feet)	= Height of Water Column (feet)	x 0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	= 1 Casing Volume (gal)
			x	

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1233							0	
1238	1.12	180	-88-88	341	60.3°	6.19	1	
1242	↓			340	60.6°	6.19	2	
	↓			341	60.3°	6.19	3	
Flow				339	60.4°	6.24	4	
After cell								

Sample TimePurge Method: Peristaltic pumpTotal Volume Removed: 5.50 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
WP-1	3-40 ml vials	YES HCL	NCL	TPHG/BTEX
WP-1	2-60 ml vials	None	NCL	TPHD/mo

Well Condition: _____

Remarks: _____

Recharged to at sample time



Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	11-1-05
Project No.:	093047	Sampler Name:	David R. Burne
Location:	Smith River, CA	Sample Type:	Ground water
Well #:	WP-2	Weather	Raining
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	NO

$$\begin{array}{l} \text{Total Well Depth} \\ \text{(feet)} \end{array} - \begin{array}{l} \text{Initial Depth to} \\ \text{Water (feet)} \end{array} = \begin{array}{l} \text{Height of Water} \\ \text{Column (feet)} \end{array} \times \begin{array}{l} 0.163 \text{ gal/ft (2-inch well) /} \\ 0.653 \text{ gal/ft (4-inch well)} \end{array} = \begin{array}{l} 1 \text{ Casing Volume} \\ \text{(gal)} \end{array}$$

	-	=	x	=	

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1312							0 gal	start
1317	1.11	120	-46				1 gal	
1325				247	61.20	6.09	250 gal	
1332	↓			246	61.40	6.08	4 gal	
1337	Flow thru cell			245	61.70	6.08	5 gal	
1355	Sample Time							

Purge Method: Peristaltic pump

Total Volume Removed: 6.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
WP-2	3 - 40 ml vials	YES HCl	NCL	TPHG / BTEX
WP-2	2 - 60 ml vials	None	NCL	TPHD / mD

Well Condition: _____

Remarks: _____

Recharged to at sample time

Water Sampling Data Sheet

Project Name:	<u>Smith River</u>	Date/Time:	<u>11-1-05</u>
Project No.:	<u>093047</u>	Sampler Name:	<u>David P. Rain</u>
Location:	<u>Smith River, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>WP-3</u>	Weather	<u>Raining</u>
Hydrocarbon Thickness/Depth (feet):	<u>N/A</u>	Key Needed:	<u>No</u>

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
	-		=		x		=	

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1133							0 gal start	
1138	4.98	10	72				0.75 gal.	
1145				54	57.7°	6.18	1.50 gal.	
1149	↓			58	57.3°	6.34	2.50 gal.	
1153	Flow			61	57.2°	6.35	3.50 gal.	
	Thick cello							
1200	Sample Time							

 Purge Method: Pneumatic pump

 Total Volume Removed: 4.50 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
WP-3	3 - 40ml vials	YES HCl	NCL	TPH/G/BTEX
WP-3	2 - 60ml vials	None	NCL	TPHD/mu

Well Condition: _____

Remarks: _____

Recharged to at sample time



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Water Sampling Data Sheet

Project Name:	<u>Smith River</u>	Date/Time:	<u>11/1/05</u>
Project No.:	<u>093047</u>	Sampler Name:	<u>Dustin Tibbets</u>
Location:	<u>Smith River, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW-4</u>	Weather	<u>Rain</u>
Hydrocarbon Thickness/Depth (feet):	<u>N/A</u>	Key Needed:	<u>YES</u>

$$\begin{array}{ccccccc} \text{Total Well Depth} & - & \text{Initial Depth to} & = & \text{Height of Water} & \times & \text{1 Casing Volume} \\ (\text{feet}) & - & \text{Water (feet)} & = & \text{Column (feet)} & \times & (\text{gal}) \\ \boxed{20.55} & - & \boxed{17.54} & = & \boxed{3.01} & \times & \boxed{0.653} \\ & & & & & & = \boxed{L97 \times 3 = 5.90} \end{array}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
<u>1041</u>				<u>283</u>	<u>59.8°</u>	<u>5.96</u>	<u>2</u>	
<u>1048</u>				<u>280</u>	<u>60.2°</u>	<u>6.11</u>	<u>4</u>	
<u>1055</u>				<u>278</u>	<u>60.2°</u>	<u>6.13</u>	<u>6</u>	
<u>1102</u>				<u>279</u>	<u>60.1°</u>	<u>6.15</u>	<u>8</u>	

Sample Time

Purge Method: Dedicated Bladder pump Total Volume Removed: 8 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
<u>MW-4</u>	<u>2 - 60ml vials</u>	<u>None</u>	<u>NCL</u>	<u>TPH</u>

Well Condition: _____

Remarks: _____

Recharged to 18.25 at sample time 1105



Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	8/11/05
Project No.:	093047	Sampler Name:	Dustin Tibbets
Location:	Smith River, CA	Sample Type:	Ground water
Well #:	MW-7	Weather	Rain
Hydrocarbon Thickness/Depth (feet):	NH	Key Needed:	YES

$$\begin{array}{l} \text{Total Well Depth} \quad \text{Initial Depth to} \\ \text{(feet)} \quad \text{Water (feet)} \end{array} = \begin{array}{l} \text{Height of Water} \\ \text{Column (feet)} \end{array} \times \begin{array}{l} 0.163 \text{ gal/ft (2-inch well)} / \\ 0.653 \text{ gal/ft (4-inch well)} \end{array} = \begin{array}{l} 1 \text{ Casing Volume} \\ (\text{gal}) \end{array}$$

16.45	-	14.55	=	1.9		x	0.653	=	1.24 x 3 = 3.72
-------	---	-------	---	-----	--	---	-------	---	-----------------

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1117	1.60						0	
1118		110	245				.05	
1132	↓			96	61.1°	5.76	1.25 gal.	
1148	No Flow			98	61.4°	5.63	2.5 gal.	
1202	thin cell			102	61.8°	5.71	2.75 gal.	

Sample Time

Purge Method: Dedicated Bladder pump

Total Volume Removed: 3.75 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-7	3 40ml vials	YES HCL	NCL	TPH/G, BTEX
MW-7	2 60ml vials	None	NCL	TPH/D

Well Condition:

Remarks:

Recharged to 14.95 at sample time 1200

Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	11/11/05
Project No.:	093047	Sampler Name:	Dustin Tibbets
Location:	Smith River, CA	Sample Type:	Ground water
Well #:	MW-19	Weather:	Rain
Hydrocarbon Thickness/Depth (feet):	N/A	Key Needed:	YES

$$\begin{array}{ccccccccc} \text{Total Well Depth} & - & \text{Initial Depth to} & = & \text{Height of Water} & \times & 0.163 \text{ gal/ft (2-inch well)} / \\ (\text{feet}) & & \text{Water (feet)} & & \text{Column (feet)} & & 0.653 \text{ gal/ft (4-inch well)} \\ \boxed{17.30} & - & \boxed{10.76} & = & \boxed{6.54} & \times & \boxed{0.653} & = & \boxed{4.27 \times 3 = 12.81} \end{array}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1229	1.08						0	
1230	100	233					.05	
1233	1			244	60°	5.97	4.5 gal	
1240	No Flow			240	61.3°	6.08	9 gal.	
1249	flow off			241	60.3°	6.11	13.5 gal.	
1259				237	60.6°	6.05	17 gal.	

Sample Time

Purge Method: Dedicated Bladder pump

Total Volume Removed: 12.8 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-19	3 - 40ml vials	YES HCL	NCL	8010/8020
MW-19	3 - 40ml vials	YES HCL	NCL	TPH/C/BCET+
MW-19	2 - 60ml vials	None	NCL	TPHD

Well Condition: _____

Remarks:

Recharged to 10.82 at sample time 1305

Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	11/11/05
Project No.:	093047	Sampler Name:	Dustin Tibbets
Location:	Smith River, CA	Sample Type:	Ground water
Well #:	MW-21	Weather:	Rain
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	YES

$$\begin{array}{l}
 \text{Total Well Depth} - \text{Initial Depth to Water (feet)} = \text{Height of Water Column (feet)} \times 0.163 \text{ gal/ft (2-inch well) / } 0.653 \text{ gal/ft (4-inch well)} = \text{1 Casing Volume (gal)} \\
 \boxed{17.10} - \boxed{10.66} = \boxed{6.44} \times \boxed{0.653} = \boxed{4.21 \times 3 = 12.62}
 \end{array}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1322				166	57.4°	6.5.98	4.25 gal.	
1329				166	57.2°	6.02	8.50 gal.	
1335				166	57.5°	6.03	12.25 gal.	

Sample Time
 Purge Method: Dedicated Bladder pump Total Volume Removed: 12.25 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-21	3-40ml VOA's	YES HCl	NCL	TPHg, TBE*
MW-21	2-60ml VOA's	None	NCL	TPHd

Well Condition: _____

Remarks:

Recharged to 10.61 at sample time 1345

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Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	11/1/05
Project No.:	093047	Sampler Name:	Dustin Tibbetts
Location:	Smith River, CA	Sample Type:	Ground water
Well #:	MW-22	Weather	Rain
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	YES

$$\begin{array}{l}
 \text{Total Well Depth} \quad \text{Initial Depth to} \quad = \quad \text{Height of Water} \\
 (\text{feet}) \quad \text{Water (feet)} \quad \quad \quad \text{Column (feet)} \quad \times \quad 0.163 \text{ gal/ft (2-inch well) /} \\
 19.06 \quad \quad \quad 14.29 \quad = \quad 4.77 \quad \quad \quad 0.653 \text{ gal/ft (4-inch well)} \quad = \quad 1 \text{ Casing Volume} \\
 \quad (gal) \\
 \quad 3.11 \times 3 = 9.34
 \end{array}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1406				213	61.9°	6.05	3.25 gal	
1414				221	61.9°	6.07	6.5 gal	
1420				219	62.6°	6.06	9.5 gal	

Sample Time

Purge Method: Dedicated Bladder pump Total Volume Removed: 2.5 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-22	3-40ml VON's	YES HCL	NCL	TPHG / BTEX
MW-22	2-60ml VON's	None	NCL	TPHD

Well Condition: _____

Remarks:

Recharged to 14.89 at sample time 1425

Appendix B
Historic Monitoring Data

Table B-1

**Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California**
(in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-2	1/28/91	<0.5 ⁶	<0.5	<0.5	<0.5	310	7	-	--	--
	4/29/91	<0.5	<0.5	<0.5	<0.5	250	--	--	--	--
	9/9/91	<0.5	<0.5	<0.5	<0.5	320	--	--	--	--
	11/18/91	--	--	--	--	180	--	--	--	--
	2/3/92	--	--	--	--	180	--	--	--	--
	5/4/92	--	--	--	--	230	--	--	--	--
	7/28/92	--	--	--	--	150	--	--	--	--
	10/12/92	--	--	--	--	190	--	--	--	--
	1/26/93	--	--	--	--	130	--	--	--	--
	4/19/93	--	--	--	--	200	--	--	--	--
	7/27/93	--	--	--	--	220	--	--	--	--
	10/27/93	--	--	--	--	200	--	--	--	--
	1/26/94	--	--	--	--	170	--	--	--	--
	4/26/94	--	--	--	--	170	--	--	--	--
	7/26/94	--	--	--	--	120	--	--	--	--
	11/1/94	--	--	--	--	200	--	--	--	--
	1/23/95	--	--	--	--	180	--	--	--	--
	4/13/95	--	--	--	--	160	--	--	--	--
	7/26/95	--	--	--	--	200	--	--	--	--
	10/31/95	--	--	--	--	250	--	--	--	--
	1/15/96	--	--	--	--	130	--	--	--	--
	4/30/96	--	--	--	--	180	--	--	--	--
	8/5/96	--	--	--	--	200	--	--	--	--
	10/29/96	--	--	--	--	300	--	--	--	--
	4/28/97	--	--	--	--	190	--	--	--	--
	10/15/97	--	--	--	--	220	--	--	--	--
	4/13/98	--	--	--	--	130	--	--	--	--
	11/23/98	--	--	--	--	150	--	--	--	--
	4/26/99	--	--	--	--	160	--	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethy-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-2	10/27/99	--	--	--	--	160	--	--	--	--
(cont'd)	4/27/00	--	--	--	--	130	--	--	--	--
MW-4	1/28/91	<0.5	<0.5	<0.5	<0.5	190	--	--	--	--
	4/29/91	<0.5	<0.5	<0.5	<0.5	210	--	--	--	--
	9/9/91	<0.5	<0.5	<0.5	<0.5	150	--	--	--	--
	11/18/91	--	--	--	--	160	--	--	--	--
	2/3/92	--	--	--	--	180	--	--	--	--
	5/4/92	--	--	--	--	240	--	--	--	--
	7/28/92	--	--	--	--	100	--	--	--	--
	10/13/92	--	--	--	--	68	--	--	--	--
	1/26/93	--	--	--	--	<50	--	--	--	--
	4/19/93	--	--	--	--	65	--	--	--	--
	7/27/93	--	--	--	--	120	--	--	--	--
	10/27/93	--	--	--	--	100	--	--	--	--
	1/26/94	--	--	--	--	110	--	--	--	--
	4/26/94	--	--	--	--	120	--	--	--	--
	7/27/94	--	--	--	--	83	--	--	--	--
	11/1/94	--	--	--	--	83	--	--	--	--
	1/23/95	--	--	--	--	<50	--	--	--	--
	4/13/95	--	--	--	--	<50	--	--	--	--
	7/26/95	--	--	--	--	120	--	--	--	--
	10/31/95	--	--	--	--	<50	--	--	--	--
	1/15/96	--	--	--	--	<50	--	--	--	--
	4/30/96	--	--	--	--	<50	--	--	--	--
	8/5/96	--	--	--	--	87	--	--	--	--
	10/29/96	--	--	--	--	140	--	--	--	--
	4/28/97	--	--	--	--	<50	--	--	--	--
	10/15/97	--	--	--	--	130	--	--	--	--
	4/13/98	--	--	--	--	<50	--	--	--	--
	11/23/98	--	--	--	--	88	--	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethy-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-4 (cont'd)	4/26/99	--	--	--	--	<50	--	--	--	--
	10/27/99	--	--	--	--	59	--	--	--	--
	4/27/00	--	--	--	--	<50	--	--	--	--
	4/25/01	--	--	--	--	<50	--	--	--	--
	4/29/02	--	--	--	--	<50	--	--	--	--
	7/29/03	--	--	--	--	<50	--	--	--	--
	1/29/04	--	--	--	--	<50	--	--	--	--
	1/27/05	--	--	--	--	<50	--	--	--	--
	11/1/05	--	--	--	--	95	--	--	--	--
MW-7	1/29/91	<0.5	<0.5	<0.5	<0.5	80	<50	--	<1.0	<1.0
	11/18/91	<0.5	<0.5	<0.5	14	100	540	--	--	--
	2/3/92	<0.5	<0.5	<0.5	<0.5	72	110	--	--	--
	5/4/92	<0.5	<0.5	<0.5	<0.5	67	<50	--	--	--
	1/26/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/19/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/93	<0.5	<0.5	<0.5	0.85	68	57	--	--	--
	1/26/94	<0.5	<0.5	<0.5	0.7	51	<50	--	--	--
	4/26/94	<0.5	<0.5	<0.5	11	62	140	--	--	--
	11/1/94	<0.5	<0.5	<0.5	13	60	290	--	--	--
	1/23/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/15/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/29/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/15/97	<0.5	<0.5	<0.5	<0.5	68	<50	--	--	--
	4/13/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/23/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/26/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-7 (cont'd)	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/04	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/05	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/1/05	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
MW-8	1/28/91	10	4.9	4.2	15.9	<50	1,100	--	<1.0	<1.0
	4/29/91	<0.5	<0.5	<0.5	12.8	54	1,700	--	<1.0	<1.0
	9/9/91	8.6	<5.0	9.2	8.2	<50	880	--	<1.0	<1.0
	11/19/91	4.9	<4.0	<4.0	<4.0	<50	1,600	--	<1.0	<1.0
	2/3/92	<2.0	<2.0	<2.0	<2.0	<50	720	--	<1.0	<1.0
	5/4/92	<1.0	<2.0	<1.0	<2.0	<50	550	--	<1.0	<1.0
	7/28/92	5.8	<5.0	<3.0	<3.0	<50	1,800	--	<1.0	<1.0
	10/12/92	5	<4.0	<4.0	5.1	65	1,100	--	<1.0	<1.0
	1/26/93	<0.5	<0.5	<0.5	<0.5	<50	360	--	<0.5	<0.5
	4/19/93	2.1	1.8	12	10.63	<50	740	--	<1.0	<1.0
	7/27/93	7.8	<7.0	23	13.5	<50	2,100	--	<1.0	<1.0
	10/27/93	5.2	3.9	18	8.3	<50	1,000	--	<1.0	<1.0
	1/26/94	<1.0	<1.0	4.5	3.8	<50	410	--	<1.0	<1.0
	4/26/94	<6.0	<6.0	9.3	3.6	<50	650	--	<1.0	<1.0
	7/26/94	7.3	<5.0	22	8.5	<50	<50	--	<1.0	<1.0
	11/1/94	7.7	<10	25	16	--	1,600	--	--	--
	1/23/95	0.69	1.4	3.3	2.7	--	290	--	--	--
	4/13/95	<0.5	1.1	2.9	2.2	--	210	--	--	--
	7/26/95	6.3	6	16	14.4	--	680	--	--	--
	10/31/95	8.3	4.4	24	14	--	1,200	--	--	--
	1/15/96	<0.5	<0.5	1.5	0.96	--	<50	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<0.5	--	<50	--	--	--
	8/5/96	7.6	3.8	20	15.1	--	700	--	--	--
	10/29/96	1.7	<0.5	4.8	2.4	<50	160	--	--	--
	4/28/97	0.87	<1.0	2.5	1.8	<50	150	--	--	--

Table B-1
**Historic Summary of Analytical Results from Groundwater and Surface Water
 Collected at Arcata Redwood; Smith River Sawmill, California**
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethylnbenzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-8 (cont'd)	10/15/97	2.7	<2.0	6.7	5.1	--	360	--	--	--
	4/13/98	0.96	<2.0	3.1	2.1	--	170	--	--	--
	11/23/98	3	<5.0	12	9.75	--	540	--	--	--
	4/26/99	4	4.8	14	10.6	--	780	--	--	--
	10/27/99	2.2	<4.0	6.7	<4.0	--	82	--	--	--
	4/27/00	<6.0	<6.0	6.7	4.4	--	400	--	--	--
MW-10	1/28/91	<0.5	<0.5	<0.5	<0.5	100	450	<1,000	<1.0	<1.0
	4/30/91	<0.5	<0.5	<0.5	<0.5	79	380	<1,000	<1.0	<1.0
	11/19/91	<5.0	<5.0	<5.0	<5.0	52	360	--	--	--
	2/3/92	<5.0	<5.0	<5.0	<5.0	<50	660	--	--	--
	5/4/92	<1.0	<1.0	<2.0	<2.0	<50	350	--	--	--
	1/26/93	<0.5	<0.5	<5.0	<5.0	55	280	--	--	--
4/20/93	<0.5	<0.5	<0.5	<2.0	<2.0	<50	210	--	--	--
	7/27/93	<2.0	<5.0	<8.0	<8.0	<50	520	--	--	--
	1/26/94	<0.5	<0.5	<4.0	<4.0	<50	450	--	--	--
	4/26/94	<0.5	<2.0	<3.0	<5.0	<50	300	--	--	--
	11/1/94	<1.0	<2.0	3.6	2	--	580	--	--	--
	1/23/95	<0.5	<0.5	<3.0	<3.0	<50	200	--	--	--
4/13/95	<0.5	<0.5	<2.0	<2.0	81	110	--	--	--	--
	7/26/95	<0.5	0.72	<1.5	<1.5	<50	140	--	--	--
	1/15/96	<0.5	<1.0	<2.0	<2.0	<50	110	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<1.5	55	99	--	--	--
	10/29/96	<0.5	<0.5	<1.0	<0.5	55	120	--	--	--
	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	170	--	--	--
4/13/98	<0.5	<0.5	0.85	0.56	51	180	--	--	--	--
	11/23/98	<0.5	<0.5	<1.5	<1.5	53	93	--	--	--
	4/26/99	<0.5	<0.5	0.55	<0.5	51	190	--	--	--
	10/27/99	<1.0	<2.0	2.1	<2.0	58	100	--	--	--
	4/27/00	<0.5	<1.0	<1.0	<1.0	<50	220	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California

Sample Location	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-12	1/29/91	4.6	4	19	44	300	1,800	--	--	--
	4/30/91	2.4	4.9	11	57	250	1,500	--	--	--
9/9/91	<5.0	<5.0	6.8	63	260	1,500	--	--	--	--
11/19/91	7.8	7	15	52	250	1,400	--	--	--	--
2/4/92	<2.5	<2.5	2.7	21	190	1,000	--	--	--	--
5/4/92	2.2	3.3	10	26	200	760	--	--	--	--
7/28/92	3.6	7.5	4.5	49.1	240	1,300	--	--	--	--
10/12/92	3.7	6.7	3.3	50.4	320	970	--	--	--	--
1/27/93	<0.5	<1.0	<1.0	<5.0	110	570	--	--	--	--
4/20/93	<0.5	<0.5	<0.5	2.16	72	230	--	--	--	--
7/27/93	2.6	7.6	4.5	40.7	160	650	--	--	--	--
10/27/93	2.5	5.4	2.5	40.7	220	710	--	--	--	--
1/27/94	<0.5	0.6	<0.5	1.53	160	200	--	--	--	--
4/27/94	0.89	2.2	2.3	5.3	100	490	--	--	--	--
7/26/94	1.9	5.1	2.2	28.6	170	760	--	--	--	--
11/1/94	2	<5.0	2.9	13.7	320	710	--	--	--	--
1/23/95	<0.5	<0.5	<0.5	<0.5	110	110	--	--	--	--
4/13/95	<0.5	<0.5	<0.5	<0.5	74	<50	--	--	--	--
7/26/95	<0.5	0.98	0.71	8.1	140	140	--	--	--	--
10/31/95	0.55	0.91	0.67	8.1	190	230	--	--	--	--
1/15/96	<0.5	<0.5	<0.5	<0.5	78	<50	--	--	--	--
4/30/96	<0.5	<0.5	<0.5	<0.5	87	<50	--	--	--	--
8/5/96	0.51	1.6	1.4	5.68	110	160	--	--	--	--
10/29/96	<0.5	<0.5	0.52	2.4	190	95	--	--	--	--
4/28/97	<0.5	<0.5	0.75	<0.5	63	84	--	--	--	--
10/16/97	<0.5	<0.5	0.64	2.2	140	180	--	--	--	--
4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--
11/24/98	<0.5	<0.5	<0.5	<0.5	69	<50	--	--	--	--
4/26/99	<0.5	<0.5	<0.5	0.84	71	<50	--	--	--	--

Table B-1
**Historic Summary of Analytical Results from Groundwater and Surface Water
 Collected at Arcata Redwood; Smith River Sawmill, California**
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethylnbenzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-12 (cont'd)	10/27/99	<0.5	0.55	<0.5	0.87	99	<50	--	--	--
	4/27/00	<0.5	<1.0	<0.5	<0.5	53	91	--	--	--
MW-14	1/29/91	2.2	1.9	1.7	12	480	470	--	--	--
	4/30/91	2.1	1.9	1.9	10	510	470	--	--	--
9/9/91	<3.0	2.7	1.7	6	320	620	--	--	--	--
	11/19/91	<5.0	<5.0	<5.0	<5.0	240	610	--	--	--
2/4/92	<3.0	<3.0	<3.0	3.4	750	550	--	--	--	--
	5/5/92	1.5	1.5	1.4	4.8	500	320	--	--	--
7/29/92	<3.0	2.7	<3.0	<3.0	<3.0	330	570	--	--	--
	10/13/92	2.2	3.2	<2.0	<2.0	350	520	--	--	--
1/27/93	1.7	1.6	2	5.6	430	700	--	--	--	--
	4/20/93	1	1.2	1.3	4.6	290	490	--	--	--
7/27/93	2	3.8	2.4	5.4	360	680	--	--	--	--
	10/28/93	1.7	2.8	<3.0	<3.0	370	540	--	--	--
1/27/94	0.99	2	<3.0	<3.0	<3.0	580	550	--	--	--
	4/27/94	1.2	1.3	1.6	3.3	480	530	--	--	--
7/27/94	1.2	2.3	<3.0	<3.0	360	560	--	--	--	--
	11/1/94	1.4	<3.0	<3.0	<3.0	620	690	--	--	--
1/24/95	0.59	1.1	1.5	3.1	720	480	--	--	--	--
	4/13/95	0.58	0.91	1.4	3.5	410	390	--	--	--
7/26/95	<0.5	0.92	1.0	2.47	380	360	--	--	--	--
	10/31/95	0.58	0.92	0.92	1.5	380	260	--	--	--
1/15/96	0.58	1.2	1	0.91	300	230	--	--	--	--
	4/30/96	<0.5	<1.0	1.1	1.3	330	230	--	--	--
8/5/96	<0.5	0.71	1.0	0.67	440	320	--	--	--	--
	10/30/96	<0.5	<1.0	0.64	0.63	520	140	--	--	--
4/28/97	<0.5	<1.0	0.77	0.53	440	220	--	--	--	--
	10/16/97	<0.5	<2.0	0.91	0.62	470	250	--	--	--
4/14/98	<0.5	<1.6	0.92	0.68	250	370	--	--	--	--
	11/24/98	<0.5	<1.0	0.83	0.58	380	280	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-14 (cont'd)	4/26/99	<0.5	1.4	0.87	0.79	350	250	--	--	--
	10/27/99	<0.5	<1.5	<2.0	<1.5	370	180	--	--	--
	4/27/00	<0.5	<2.0	<2.0	<2.0	190	340	--	--	--
MW-15	1/29/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	9/10/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/19/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/26/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
MW-16	1/29/91	<0.5	<0.5	<0.5	<0.5	200	<50	<1,000	<1.0	<1.0
	4/30/91	<0.5	<0.5	<0.5	0.54	250	63	<1,000	<1.0	<1.0
	9/10/91	<1.0	<1.0	<1.0	<0.5	180	<50	<1,000	<1.0	<1.0
	11/19/91	<0.5	<0.5	<0.5	<0.5	120	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	58	<50	<1,000	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	130	<50	<1,000	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
(in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethylnbenzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-16 (cont'd)	7/29/92	<0.5	<0.5	<0.5	<0.5	87	<50	<1,000	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	97	<50	<1,000	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	120	<50	<1,000	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	130	<50	<1,000	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	100	<50	<1,000	--	--
	11/1/94	--	--	--	--	500	--	--	--	--
	1/24/95	--	--	--	--	<50	--	--	--	--
	4/13/95	--	--	--	--	<50	--	--	--	--
	7/27/95	--	--	--	--	84	--	--	--	--
	11/1/95	--	--	--	--	<50	--	--	--	--
	1/16/96	--	--	--	--	<50	--	--	--	--
	5/1/96	--	--	--	--	64	--	--	--	--
	8/6/96	--	--	--	--	120	--	--	--	--
	10/30/96	--	--	--	--	100	--	--	--	--
	4/28/97	--	--	--	--	<50	--	--	--	--
	10/16/97	--	--	--	--	94	--	--	--	--
	4/14/98	--	--	--	--	<50	--	--	--	--
	11/24/98	--	--	--	--	<50	--	--	--	--
	4/26/99	--	--	--	--	55	--	--	--	--
	10/28/99	--	--	--	--	120	--	--	--	--
	4/27/00	--	--	--	--	<50	--	--	--	--
MW-17	1/29/91	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--
	4/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--
	9/10/91	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--
	11/19/91	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--

Table B-1
**Historic Summary of Analytical Results from Groundwater and Surface Water
 Collected at Arcata Redwood; Smith River Sawmill, California**
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	1,2-DCB ⁴	EPA 8010/8020 ³	1,4-DCB ⁵
MW-17 (cont'd)	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/26/99	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/27/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
MW-18	1/25/90	<0.5	<0.5	<0.5	<0.5	160	<50	--	<1.0	<1.0	<1.0
	5/1/90	<0.5	<0.5	<0.5	<0.5	114	<50	--	<1.0	<1.0	<1.0
	11/7/90	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--	--
	1/29/91	<0.5	<0.5	<0.5	<0.5	220	<50	--	--	--	--
	4/30/91	<0.5	<0.5	<0.5	<0.5	250	<50	--	--	--	--
	9/10/91	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	97	52	--	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	71	<50	--	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--	--
	7/27/95	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--	--
	11/1/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--
	8/6/96	<0.5	<0.5	<0.5	<0.5	89	<50	--	--	--	--
	10/25/00	<0.5	<0.5	<0.5	<0.5	89	<50	--	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³
									1,2-DCB ⁴
									1,4-DCB ⁵
MW-19	1/29/91	<0.5	1.9	<0.5	1114	890	45,000	--	<1.0
	4/30/91	<0.5	<0.5	<0.5	1114	810	45,000	--	<1.0
	9/10/91	<1.0	3.2	2.4	905	550	38,000	--	<1.0
	11/19/91	<1.0	3	<1.0	842	580	38,000	--	<1.0
	2/4/92	<1.0	2.5	1.6	1817	740	47,000	--	<1.0
	5/5/92	<0.5	1.7	2.7	657	520	29,000	--	<1.0
	7/29/92	<1.0	2.4	2	1014	420	37,000	--	<1.0
	10/13/92	<1.0	2.8	3.2	1019	360	29,000	--	<1.0
	1/27/93	<0.5	0.7	<0.5	810	390	53,000	--	1.6
	4/20/93	<1.0	<1.0	1.8	816	140	25,000	--	<2.0
	7/28/93	<1.0	1.1	2.7	560	470	31,000	--	<1.0
	10/28/93	<1.0	1.8	2.9	851	580	23,000	--	<1.0
	1/27/94	<1.0	1.3	2.5	993	600	42,000	--	1.3
	4/27/94	<1.0	<1.0	<1.0	295.9	340	15,000	--	<1.0
	7/27/94	<1.0	<1.0	1.7	569.4	660	29,000	--	<1.0
	11/1/94	<1.0	2.5	1.1	306.6	440	25,000	--	<1.0
	1/24/95	<10.0	<10.0	<10.0	467.2	380	17,000	--	<1.0
	4/13/95	<0.5	0.68	1.9	643	500	25,000	--	1.4
	7/27/95	<0.5	0.67	0.98	163.2	310	6,700	--	1.4
	11/1/95	<0.5	1.0	1.6	307.2	320	16,000	--	1.9
	1/16/96	<0.5	0.95	1.8	262	150	28,000	--	1.6
	5/1/96	<0.5	0.53	0.72	174.2	170	10,000	--	<1.0
	8/6/96	<0.5	<0.5	0.86	142.8	380	7,800	--	1.2
	10/30/96	1	1.9	1.1	387.4	570	9,800	--	1.1
	1/28/97	<0.5	<0.5	0.8	256	260	12,000	--	<1.0
	4/28/97	<0.5	0.62	1.2	379	300	15,000	--	1.7
	7/29/97	<0.5	0.74	1.4	217	150	13,000	--	<1.0
	10/16/97	<0.5	1.2	206.9	320	13,000	--	<1.0	<1.0
	1/26/98	<0.5	0.69	204.6	120	9,100	--	2.7	<3.0
	4/14/98	<0.5	0.76	1.8	521	210	33,000	--	<100

Table B-1
**Historic Summary of Analytical Results from Groundwater and Surface Water
 Collected at Arcata Redwood; Smith River Sawmill, California**
¹(in ug/L)

Sample Location	Date	Benzene	Toluene	Ethy-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³		
									1,2-DCB ⁴	1,4-DCB ⁵	
MW-19 (cont'd)	7/27/98	<0.5	0.89	1.6	246.1	470	14,000	--	<2.0	<1.0	
	11/24/98	<1.0	<1.0	<1.0	175	240	15,000	--	<2.0	<1.0	
1/27/99	<0.5	<0.5	<0.5	58	65	3,300	--	<1.0	<1.0	<1.0	
4/27/99	<0.5	<0.5	0.59	80.7	180	6,300	--	<1.0	<1.0	<1.0	
10/28/99	<0.5	0.75	0.79	215	220	11,000	--	<1.0	<1.0	<1.0	
1/18/00	<0.5	<0.5	<0.5	42.61	75	3,600	--	<1.0	<1.0	<1.0	
4/27/00	<0.5	<0.5	<0.5	121.6	67	5,200	--	<1.0	<1.0	<1.0	
7/25/00	<0.5	<0.5	<0.5	69.3	150	5,700	--	<1.0	<1.0	<1.0	
10/25/00	<0.5	<0.5	<0.5	67.2	330	4,900	--	<1.0	<1.0	<1.0	
1/29/01	<0.5	<0.5	<0.5	112.2	1,600	5,000	--	<1.0	<1.0	<1.0	
4/25/01	<0.5	<0.5	<0.5	97.9	250	5,400	--	<1.0	<1.0	<1.0	
7/25/01	<0.5	<0.5	<0.5	112.8	350	5,700	--	<1.0	<1.0	<1.0	
11/1/01	<0.5	0.82	0.74	265.2	590	12,000	--	<1.0	<1.0	<1.0	
1/29/02	<0.5	<0.5	<0.5	31	96	920	--	<1.0	<1.0	<1.0	
4/29/02	<0.5	<0.5	<0.5	100.6	280	4,400	--	<1.0	<1.0	<1.0	
7/29/02	<0.5	<0.5	<0.5	79.3	260	3,800	--	<1.0	<1.0	<1.0	
10/31/02	<0.5	<0.5	0.77	193.7	330	10,000	--	<1.0	<1.0	<1.0	
1/30/03	<0.5	<0.5	<0.5	33	150	1,000	--	<1.0	<1.0	<1.0	
7/29/03	<1.0	1.8	<1.0	54.88	250 ¹¹	3,000 ⁹	--	<1.0	<1.0	<1.0	
1/29/04	<0.5	<0.5	<0.5	81	140 ^{8,11}	1,300 ⁹	--	<1.0	<1.0	<1.0	
6/28/04	<0.50	<0.50	<0.50	30	140 ¹¹	1,700 ⁹	--	--	<1.0	<1.0	
1/27/05	<0.50	<0.50	<0.50	94.6	140	4,000 ¹⁰	--	<1.0	<1.0	<1.0	
6/6/05	<0.50	<0.50	<0.50	77.2	210	4,100	--	<1.0	<1.0	<1.0	
11/1/05	<0.50	<0.50	<0.50	51.73	320	1,700	--	<1.0	<1.0	<1.0	
MW-20	1/29/91	<0.5	<0.5	<0.5	<0.5	110	<50	--	<1.0	<1.0	<1.0
	4/30/91	<0.5	<0.5	<0.5	<0.5	80	<50	--	<1.0	<1.0	<1.0
9/10/91	<1.0	<1.0	<1.0	<0.5	<0.5	<50	<50	--	<1.0	<1.0	<1.0
11/20/91	<1.0	<1.0	<1.0	<0.5	<0.5	<50	<50	--	<1.0	<1.0	<1.0
2/4/92	<1.0	<1.0	<1.0	<0.5	<0.5	<50	<50	--	<1.0	<1.0	<1.0
5/5/92	<1.0	<1.0	<1.0	<0.5	<0.5	81	<50	--	<1.0	<1.0	<1.0
7/29/92	<1.0	<1.0	<1.0	<0.5	<0.5	83	<50	--	<1.0	<1.0	<1.0

Table B-1
**Historic Summary of Analytical Results from Groundwater and Surface Water
 Collected at Arcata Redwood; Smith River Sawmill, California**
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-20 (cont'd)	10/13/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<0.5	<0.5
	4/20/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	10/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/14/95	<0.5	<0.5	<0.5	<0.5	60	<50	--	--	--
	7/27/95	--	--	--	--	71	--	--	--	--
	1/16/96	--	--	--	--	<50	--	--	--	--
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	8/6/96	--	--	--	--	<50	--	--	--	--
	10/30/96	--	--	--	--	71	--	--	--	--
	1/28/97	--	--	--	--	<50	--	--	--	--
	4/29/97	--	--	--	--	<50	--	--	--	--
	7/29/97	--	--	--	--	<50	--	--	--	--
	10/16/97	--	--	--	--	61	--	--	--	--
	1/26/98	--	--	--	--	87	--	--	--	--
	4/14/98	--	--	--	--	<50	--	--	--	--
	7/27/98	--	--	--	--	<50	--	--	--	--
	11/24/98	--	--	--	--	<50	--	--	--	--
	1/27/99	--	--	--	--	<50	--	--	--	--
	10/28/99	--	--	--	--	<50	--	--	--	--
	1/18/00	--	--	--	--	<50	--	--	--	--
	4/27/00	--	--	--	--	<50	--	--	--	--
MW-21	2/4/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	5/5/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/29/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	10/13/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-21 (cont'd)	1/27/93	<0.5	<0.5	<0.5	0.8	<50	<50	--	<0.5	<0.5
	4/20/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	10/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/14/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	1/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	4/29/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	7/29/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	10/16/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	1/26/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	7/27/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	11/24/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	4/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	7/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	10/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	1/29/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	7/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	11/1/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	1/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
(in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-21 (cont'd)	4/30/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/30/03	<0.5	<0.5	<0.5	<1.0	68	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/04	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	6/28/04	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--
	1/27/05	<0.50	<0.50	<0.50	<0.50	63	<50	--	--	--
	6/6/05	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--
	11/1/05	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--
MW-22	1/29/91	<0.5	<0.5	<0.5	121	320	7,500	--	<1.0	<1.0
	5/1/91	<0.5	<0.5	<0.5	392	300	15,000	--	<1.0	<1.0
	9/11/91	<1.0	<1.0	<1.0	48	140	3,100	--	<1.0	<1.0
	11/20/91	<1.0	<1.0	<1.0	68	120	3,600	--	<1.0	<1.0
	2/4/92	<1.0	<1.0	<1.0	211	250	5,100	--	<1.0	<1.0
	5/5/92	<1.0	<1.0	<1.0	152	220	6,000	--	<1.0	<1.0
	7/29/92	<1.0	<1.0	<1.0	44	170	3,700	--	<1.0	<1.0
	10/13/92	<1.0	<1.0	<1.0	19	79	920	--	<1.0	<1.0
	1/27/93	<0.5	<0.5	<0.5	320	180	18,000	--	<0.5	<0.5
	4/20/93	<1.0	<1.0	<1.0	282.7	98	7,700	--	<1.0	<1.0
	7/28/93	<1.0	<1.0	<1.0	121.6	190	6,200	--	<1.0	<1.0
	10/28/93	<1.0	<1.0	<1.0	21.4	170	1,700	--	<1.0	<1.0
	1/27/94	<1.0	<1.0	<1.0	141.5	170	6,400	--	<1.0	<1.0
	4/27/94	<1.0	<1.0	<1.0	101.2	180	3,800	--	<1.0	<1.0
	7/27/94	<1.0	<1.0	<1.0	11	170	1,900	--	<1.0	<1.0
	11/1/94	<2.5	<2.5	<2.5	22	170	2,200	--	--	--
	1/24/95	<2.5	<2.5	<2.5	54	140	2,900	--	--	--
	4/14/95	<0.5	<0.5	<0.5	131.3	170	3,200	--	--	--
	7/27/95	<0.5	<0.5	<0.5	1.6	<50	190	--	--	--
	11/1/95	<0.5	<0.5	<0.5	0.77	<50	360	--	--	--
	1/16/96	<0.5	<0.5	<0.5	81.56	61	2,200	--	--	--

Table B-1
**Historic Summary of Analytical Results from Groundwater and Surface Water
 Collected at Arcata Redwood; Smith River Sawmill, California**
¹(in ug/L)

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-22 (cont'd)	5/1/96	<0.5	<0.5	<0.5	51.53	100	2,000	--	--	--
	8/6/96	<0.5	<0.5	<0.5	3.2	88	370	--	--	--
	10/30/96	<0.5	<0.5	<0.5	10	140	570	--	--	--
	1/28/97	<0.5	<0.5	<0.5	5.3	96	350	--	--	--
	4/29/97	<0.5	<0.5	<0.5	32	87	1,300	--	--	--
	7/29/97	<0.5	<0.5	<0.5	14	<50	870	--	--	--
	10/16/97	<0.5	<0.5	<0.5	15	100	670	--	--	--
	1/26/98	<5.0	<5.0	<5.0	34	110	2,000	--	--	--
	4/14/98	<5.0	<5.0	<5.0	46.73	74	1,900	--	--	--
	7/27/98	<5.0	<5.0	<5.0	11	110	1,000	--	--	--
	11/24/98	<0.5	<0.5	<0.5	41	71	990	--	--	--
	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	86	--	--	--
	4/27/99	<0.5	<0.5	<0.5	9.8	<50	430	--	--	--
	10/28/99	<0.5	<0.5	<0.5	2.4	<50	340	--	--	--
	1/18/00	<0.5	<0.5	<0.5	<0.5	<50	68	--	--	--
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	380	--	--	--
	7/25/00	<0.5	<0.5	<0.5	8.6	59	800	--	--	--
	10/25/00	<0.5	<0.5	<0.5	0.91	95	74	--	--	--
	1/29/01	<0.5	<0.5	<0.5	2.5	120	120	--	--	--
	4/25/01	<0.5	<0.5	<0.5	2.7	<50	190	--	--	--
	7/25/01	<0.5	<0.5	<0.5	0.67	85	350	--	--	--
	11/1/01	<0.5	<0.5	<0.5	<0.5	74	58	--	--	--
	1/29/02	<0.5	2.2	<0.5	<0.5	<50	<50	--	--	--
	4/30/02	<0.5	<0.5	<0.5	2.6	91	120	--	--	--
	7/29/02	<0.5	<0.5	<0.5	1.9	86	470	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	75	59	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	75	59	--	--	--
	1/30/03	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	7/29/03	<0.5	<0.5	<1.0	<50	<50	<50	--	--	--
	1/29/04	<0.5	<0.5	<1.0	<50	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-22 (cont'd)	6/28/04	<0.50	<0.50	<0.50	<0.50	54 ⁸	<50	--	--	--
	1/27/05	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--
	6/6/05	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--
	11/1/05	<0.50	<0.50	<0.50	<0.50	57	<50	--	--	--
MW-25	8/1/90	0.6	<0.5	<0.5	<0.5	<50	--	--	--	--
	11/8/90	<0.5	<0.5	<0.5	<0.5	68	--	--	--	--
	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	5/1/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	9/11/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	11/20/91	--	--	--	--	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	1/28/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--

Table B-1
 Historic Summary of Analytical Results from Groundwater and Surface Water
 Collected at Arcata Redwood; Smith River Sawmill, California
 (in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	
									1,2-DCB ⁴	1,4-DCB ⁵
MW-25 (cont'd)	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
UP DC ¹²	8/1/90	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/18/90	<1.0	<1.0	<1.0	<0.5	150	<50	--	--	--
	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	5/1/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	9/11/91	<1.0	<1.0	<1.0	<0.5	<50	<50	--	--	--
	11/20/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/21/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	8/6/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/26/98	<0.5	<0.5	<0.5	<0.5	74	<50	--	--	--
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/24/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
¹(in ug/L)

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	EPA 8010/8020 ³	1,2-DCB ⁴	1,4-DCB ⁵
UP DC (cont'd)	4/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	1/18/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	7/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	10/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	11/1/01	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	1/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	4/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	7/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	10/31/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	1/30/03	<0.5	<0.5	<0.5	<1.0	<50	<50	<50	-	-	-
	4/29/03	<0.5	<0.5	<0.5	<1.0	<50	<50	<50	-	-	-
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
LOW DC ¹³	8/1/90	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	11/8/90	<1.0	<1.0	<1.0	<0.5	<50	<50	<50	<1.0	<1.0	<1.0
	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	5/1/91	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	9/11/91	<1.0	<1.0	<1.0	<0.5	<50	<50	<50	-	-	-
	11/20/91	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	1/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	4/21/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	-	-	-

Table B-1
Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California
(in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	1,2-DCB ⁴	EPA 8010/8020 ³	1,4-DCB ⁵
LOW DC (cont'd)	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	11/1/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/24/95	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/27/95	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	11/1/95	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/16/96	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	8/6/96	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/29/97	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/29/97	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/26/98	<0.5	<0.5	<0.5	<0.5	67	<50	<50	--	--	--
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/27/98	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	11/24/98	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/18/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	10/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	11/1/01	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	4/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	7/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--

Table B-1

**Historic Summary of Analytical Results from Groundwater and Surface Water
Collected at Arcata Redwood; Smith River Sawmill, California**
(in ug/L)¹

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD ²	TPHG ²	TPHIR ²	1,2-DCB ⁴	EPA 8010/8020 ³	1,4-DCB ⁵
LOW DC (cont'd)	10/31/02	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--
	1/30/03	<0.5	<0.5	<0.5	<1.0	<50	<50	<50	--	--	--
	4/29/03	<0.5	<0.5	<0.5	<1.0	<50	<50	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	<50	--	--	--

1. ug/L: micrograms per Liter; same as parts per billion (ppb)

2. TPHD: Total Petroleum Hydrocarbons as Diesel; TPHG: TPH as Gasoline; TP FIR: TPH by infrared spectrometry

3. Volatile Organics from EPA 8010 and 8020 that have not been detected are not listed in the table.

4. 1,2-DCB: 1,2-Dichlorobenzene

5. 1,4-DCB: 1,4-Dichlorobenzene

6. < denotes a value that is "less than" the laboratory method detection limit.
7. -: Indicates analysis not conducted

8. Sample contains material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil; all diesel results reported represent the amount of material in the diesel range of molecular weights only

9. Sample does not have the typical pattern of fresh gasoline. The results reported represent the amount of material in the gasoline range

10. Detection limit was raised due to matrix interference

11. Sample contains some material of lighter molecular weight than diesel

12. UP DC: "Upper" Dominie Creek sample station located above bridge, approximately 300 feet above DCBM-1

13. LOW DC: "Lower" Dominie Creek sample station located downstream from site, approximately 100 feet below DCBM-4

Table B-2
Historic Groundwater Analytical Results, Well Point Locations
Arcata Redwood Company; Smith River, California
(in ug/L)¹

Sample Location	Sample Date	TPHG ²	TPHD ³	TPHMO ⁴	B ⁵	T ⁵	E ⁵	X ⁵	MTBE ⁶
WP-1	11/14/97	37,000	NA ⁷	NA	<10 ^{8,9}	<10 ⁹	<10 ⁹	<10 ⁹	<100 ⁹
	12/22/97	39,000	730	<500	<0.50	1.6	3.1	1,006	<5.0 ⁹
	1/26/98	34,000	470	<500	<0.50	0.8	2.3	623	<5.0 ⁹
	4/15/98	55,000	350	<500	<0.50	1	2.1	866	<5.0 ⁹
	7/27/98	33,000	750	610	<25 ⁹	<25 ⁹	<25 ⁹	550	<250
	11/24/98	48,000	470	<500	<0.50	1.2	2.9	685	<5.0 ⁹
	1/27/99	47,000	780	<500	<0.50	1.7	3.3	832	<5.0 ⁹
	4/27/99	46,000	970	<500	<0.50	1.8	3.7	922	<3.0
	10/28/99	17,000	710	<500	<0.50	2.9	1.7	352	<3.0
	1/18/00	43,000	660	<500 ⁹	<0.50	1.3	1.6	594	<3.0
	4/28/00	39,000	490	<170	<0.50	1.1	1.6	734	<3.0
	7/25/00	34,000	490	<170	<0.50	0.79	1.6	563	<3.0
	10/26/00	33,000	530	170	<0.50	0.85	1.4	530.1	<3.0
	1/29/01	27,000	1,600	1,600	<0.50	0.98	1.7	543	<3.0
	4/25/01	30,000	780	280	<0.50	0.74	1.5	573	<3.0
	7/25/01	35,000	880	550	<0.50	0.63	1.4	562	<3.0
	11/1/01	30,000	1,700	280	<0.50	3.8	1.4	572	<3.0
	1/29/02	26,000	730	<170	<0.50	0.76	0.91	358.2	<3.0
	4/29/02	26,000	410	<170	<0.50	0.98	1.4	470	<3.0
	7/29/02	23,000	650	<170	<0.50	0.73	1.1	408.5	<3.0
	10/31/02	14,000	2,000	630	<0.50	0.63	0.79	285.8	<3.0
	1/30/03	14,000	460	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	265.5	<30 ⁹
	4/29/03	11,000	450	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	200	<30 ⁹
	7/29/03	25,000 ¹⁰	830 ^{12,13}	190 ¹⁴	<0.50	0.87	1.4	500	<3.0
	1/29/04	9,300 ¹⁰	860 ^{12,13}	<170	<0.50	<0.50	<0.50	192.5	<3.0
	6/28/04	23,000 ¹⁰	840 ^{12,13}	<170	<0.50	0.67	1.2	408.6	<3.0
	1/26/05	12,000 ¹¹	420	<170	<0.50	0.64	0.65	234.3	<3.0
	6/6/05	18,000 ¹¹	440 ^{12,13}	<170	<0.50	0.6	0.84	306	<3.0
	11/1/05	16,000 ¹¹	990 ^{12,13}	250	<0.50	<0.50	0.68	224.6	<3.0
WP-2	11/14/97	46,000	2,100	980	<0.50	3.4	6.2	994	<5.0 ⁹
	12/22/97	53,000	510	<500	<0.50	2	5	1,440	<5.0 ⁹
	1/26/98	22,000	380	<500	<0.50	1.1	1.4	452	<5.0 ⁹
	4/15/98	20,000	420	<500	<0.50	<0.5	0.59	326	<5.0 ⁹
	7/27/98	55,000	660	<500	<25 ⁹	<25 ⁹	<25 ⁹	1,358	<250 ⁹
	11/24/98	19,000	460	1,000	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	415	<50 ⁹
	1/27/99	39,000	790	<500	<0.50	2.1	4.3	1,129	<5.0 ⁹
	4/27/99	54,000	880	<500	<0.50	2.7	5.9	1,838	<3.0
	10/28/99	53,000	700	<500	<0.50	2.8	4	1,440	<3.0
	1/18/00	35,000	300	<500 ⁹	<0.50	1.4	2	747	<3.0
	4/28/00	44,000	780	220	<0.50	2.7	3.8	1,734	<3.0
	7/25/00	45,000	510	<170	<0.50	1.7	3.1	1,125	<3.0
	10/26/00	56,000	520	<170	<0.50	2.2	2.9	963	<3.0
	1/29/01	49,000	51,000	93,000	<0.50	3	3.4	2,152	<3.0
	4/25/01	43,000	960	560	<0.50	1.7	3.3	1,330	<3.0
	7/25/01	NQ ¹⁴	700	340	<0.50	1.3	3.1	NQ	<3.0
	11/1/01	47,000	850	<170	<0.50	2.4	3.5	1,532	<3.0
	1/29/02	27,000	620	230	<0.50	1.2	1.6	755	<3.0
	4/29/02	38,000	530	<170	<0.50	1.9	3.1	1,124	<3.0
	7/29/02	47,000	490	<170	<0.50	1.2	2.6	912	<3.0
	10/31/02	64,000	26,000	10,000	<0.50	2.1	2.5	920	<3.0

Table B-2
Historic Groundwater Analytical Results, Well Point Locations
Arcata Redwood Company; Smith River, California
(in ug/L)¹

Sample Location	Sample Date	TPHG ²	TPHD ³	TPHMO ⁴	B ⁵	T ⁵	E ⁵	X ⁵	MTBE ⁶
	1/30/03	6,700	220	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	180	<30 ⁹
	4/29/03	18,000	560	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	541	<30 ⁹
	7/29/03	40,000 ⁹	680 ^{12,13}	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	1,223	<30 ⁹
	1/29/04	25,000 ⁹	420 ^{12,13}	<170	<0.50	0.8	1.7	885	<3.0
	6/28/04	40,000 ⁹	350 ^{12,13}	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	1,020	<30 ⁹
	1/26/05	43,000 ¹¹	660	<170	<0.50	0.92	2.6	889	<3.0
	6/6/05	42,000 ¹¹	630 ^{12,13}	<170	<0.50	0.72	2.3	777	<3.0
	11/1/05	42,000 ¹¹	2,600 ^{12,13}	1,100	<0.50	0.84	2.2	809	<3.0
WP-3	10/29/99	15,000	360	<500	<0.50	0.67	0.76	225.1	<3.0
	1/18/00	22,000	300	<500 ⁹	<0.50	0.52	0.87	265.5	<3.0
	4/28/00	7,600	180	<170	<0.50	<0.5	<0.5	112	<3.0
	7/25/00	14,000	280	<170	<0.50	0.53	0.74	214.3	<3.0
	10/26/00	16,000	320	<170	<0.50	0.73	0.79	215.1	<3.0
	1/29/01	8,100	160	<170	<0.50	<0.5	0.71	184.9	<3.0
	4/25/01	16,000	550	<170	<0.50	<0.5	0.9	296.2	<3.0
	7/25/01	18,000	790	230	<0.50	<0.5	0.62	285.8	<3.0
	11/1/01	14,000	470	<170	<0.50	0.79	0.83	245.5	<3.0
	1/29/02	13,000	460	<170	<0.50	<0.5	0.54	163.5	<3.0
	4/29/02	10,000	260	<170	<0.50	<0.5	0.66	214	<3.0
	7/29/02	13,000	330 ⁸	<170	<0.50	0.57	0.79	213.9	<3.0
	10/31/02	13,000	580	<170	<0.50	0.59	1.1	224.3	<3.0
	1/30/03	9,900	360	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	<30 ⁹	<30 ⁹
	4/29/03	6,400	270	<170	<5.0 ⁹	<5.0 ⁹	<5.0 ⁹	<30 ⁹	<30 ⁹
	7/29/03	9,300 ⁹	310 ^{12,13}	<170	<0.50	<0.5	0.62	173	<3.0
	1/29/04	6,500 ⁹	260 ^{12,13}	<170	<0.50	<0.5	<0.5	131.8	<3.0
	6/28/04	9,000 ⁹	260 ^{12,13}	<170	<0.50	<0.50	0.57	112.2	<3.0
	1/26/05	7,400 ¹¹	320	<170	<0.50	<0.50	<0.50	132	<3.0
	6/6/05	1,700 ¹¹	130 ^{12,13}	76	<0.50	<0.50	<0.50	31.55	<3.0
	11/1/05	260 ¹¹	<50	<170	<0.50	<0.50	<0.50	3.2	<3.0
WP-4	10/29/99	<100 ⁹	98	<500	<0.50	10	<0.50	<1.0	<3.0
	1/18/00	<50	<50	<500 ⁹	<0.50	<0.5	<0.50	<0.50	<3.0
	4/28/00	<50	61	<170	<0.50	1.6	<0.50	<0.50	<3.0
	7/25/00	<50	71	<170	<0.50	<0.50	<0.50	<0.50	<3.0

1. ug/L: micrograms per Liter

2. TPHG: Total Petroleum Hydrocarbons as Gasoline, analyzed in general accordance with EPA Method Nos. 5030/GCFID/8015B

3. TPHD: Total Petroleum Hydrocarbons as Diesel, analyzed in general accordance with EPA Method Nos. 3550 or 3510/GCFID/8015B

4. TPHMO: Total Petroleum Hydrocarbons as Motor Oil, analyzed in general accordance with EPA Method Nos. 3550 or 3510/GCFID/8015B.

5. BTEX: Benzene, Toluene, Ethylbenzene and total Xylenes, analyzed in general accordance with EPA Method Nos. 602 or 5030/8021B

6. MTBE: Methyl Tertiary-Butyl Ether, analyzed in general accordance with EPA Method Nos. 606 or 5030/8021B

7. NA: Not Applicable/Not Analyzed

8. <: Denotes a value that is "less than" the laboratory method detection limit.

9. Reporting limit was raised due to matrix interference.

10. Sample does not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

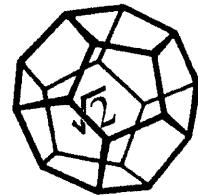
11. The reported value includes the reported gasoline components in addition to other peaks in the gasoline range.

12. Sample contains some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.

13. Sample contains material similar to degraded or weathered diesel oil.

14. The sample does not have the typical pattern of fresh motor oil. However, the reported result represents the amount of material in the motor oil range.

Appendix C
Laboratory Analytical Report



**NORTH COAST
LABORATORIES LTD.**

November 14, 2005

Green Diamond Resource Company
P.O. Box 68
Korbel, CA 95550

Attn: Jeff Lane

RE: 093047, Smith River

Order No.: 0511014
Invoice No.: 54292
PO No.: SA# 1508-03-AD-0
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction Client Sample Description

01A	MW-4
02A	WP-3
02D	WP-3
03A	MW-7
03D	MW-7
04A	WP-1
04D	WP-1
05A	MW-19
05D	MW-19
05F	MW-19
06A	WP-2
06D	WP-2
07A	MW-21
07D	MW-21
08A	MW-22
08D	MW-22

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.
Laboratory Director

CLIENT: Green Diamond Resource Company
Project: 093047, Smith River
Lab Order: 0511014

CASE NARRATIVE**TPH as Diesel/Motor Oil:**

Samples WP-1 and WP-2 contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights. These samples also contain material similar to degraded or weathered diesel oil.

Samples WP-1 and WP-2 do not have the typical pattern of fresh motor oil. However, the results reported represent the amount of material in the motor oil range.

TPH as Diesel:

Sample MW-19 contains some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.

Samples MW-4, MW-19 and MW-22 contain material similar to degraded or weathered diesel oil.

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries were above the upper acceptance limit for diesel. The LCSD recovery for the surrogate was also above the upper acceptance limit. The reported results may be higher than the actual amount present in the samples.

TPH as Gasoline:

The gasoline values for samples WP-3, WP-1, MW-19 and WP-2 include the reported gasoline components in addition to other peaks in the gasoline range.

BTEX:

The surrogate recovery was below the lower acceptance limit for sample MW-7. The response of the reporting limit standard was such that the analytes would have been detected even with the low recovery; therefore, the data were accepted.

EPA 8021B:

The positive results for sample MW-19 were confirmed by second column and second detector.

The dichlorodifluoromethane, chloromethane, bromomethane and bromoform reporting limits were raised due to a loss of instrument sensitivity.

The relative percent difference's (RPD's) for the laboratory control samples were above the upper acceptance limits for chloromethane, bromomethane and 1,1,2,2-tetrachloroethane. This indicates that the results could be variable. Since there were no detectable levels of analyte in the sample, the data were accepted.

Date: 14-Nov-05
WorkOrder: 0511014

ANALYTICAL REPORT

Client Sample ID: MW-4
Lab ID: 0511014-01A

Received: 11/1/05

Collected: 11/1/05 11:05

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	95	50	µg/L	1.0	11/8/05	11/9/05
Surrogate: N-Tricosane	84.5	70-130	% Rec	1.0	11/8/05	11/9/05

Client Sample ID: WP-3
Lab ID: 0511014-02A

Received: 11/1/05

Collected: 11/1/05 12:00

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0	11/8/05	
Benzene	ND	0.50	µg/L	1.0	11/8/05	
Toluene	ND	0.50	µg/L	1.0	11/8/05	
Ethylbenzene	ND	0.50	µg/L	1.0	11/8/05	
m,p-Xylene	ND	0.50	µg/L	1.0	11/8/05	
o-Xylene	3.2	0.50	µg/L	1.0	11/8/05	
Surrogate: Cis-1,2-Dichloroethylene	88.2	85-115	% Rec	1.0		11/8/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	260	50	µg/L	1.0		11/8/05

Client Sample ID: WP-3
Lab ID: 0511014-02D

Received: 11/1/05

Collected: 11/1/05 12:00

Test Name: TPH as Diesel/Motor Oil

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	11/10/05	11/11/05
TPHC Motor Oil	ND	170	µg/L	1.0	11/10/05	11/11/05

Date: 14-Nov-05
WorkOrder: 0511014

ANALYTICAL REPORT

Client Sample ID: MW-7
Lab ID: 0511014-03A

Received: 11/1/05

Collected: 11/1/05 12:10

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		11/7/05
Benzene	ND	0.50	µg/L	1.0		11/7/05
Toluene	ND	0.50	µg/L	1.0		11/7/05
Ethylbenzene	ND	0.50	µg/L	1.0		11/7/05
m,p-Xylene	ND	0.50	µg/L	1.0		11/7/05
o-Xylene	ND	0.50	µg/L	1.0		11/7/05
Surrogate: Cis-1,2-Dichloroethylene	84.8	85-115	% Rec	1.0		11/7/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		11/7/05

Client Sample ID: MW-7

Received: 11/1/05

Collected: 11/1/05 12:10

Lab ID: 0511014-03D

Test Name: TPH as Diesel

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	11/8/05	11/9/05
Surrogate: N-Tricosane	104	70-130	% Rec	1.0	11/8/05	11/9/05

Client Sample ID: WP-1

Received: 11/1/05

Collected: 11/1/05 12:55

Lab ID: 0511014-04A

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		11/8/05
Benzene	ND	0.50	µg/L	1.0		11/8/05
Toluene	ND	0.50	µg/L	1.0		11/8/05
Ethylbenzene	0.68	0.50	µg/L	1.0		11/8/05
m,p-Xylene	4.6	0.50	µg/L	1.0		11/8/05
o-Xylene	220	50	µg/L	100		11/8/05
Surrogate: Cis-1,2-Dichloroethylene	92.5	85-115	% Rec	1.0		11/8/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	16,000	5,000	µg/L	100		11/8/05

Date: 14-Nov-05
WorkOrder: 0511014

ANALYTICAL REPORT

Client Sample ID: WP-1 Received: 11/1/05 Collected: 11/1/05 12:55
Lab ID: 0511014-04D

Test Name: TPH as Diesel/Motor Oil Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	990	50	µg/L	1.0	11/10/05	11/11/05
TPHC Motor Oil	250	170	µg/L	1.0	11/10/05	11/11/05

Client Sample ID: MW-19 Received: 11/1/05 Collected: 11/1/05 13:05
Lab ID: 0511014-05A

Test Name: BTEX Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		11/8/05
Benzene	ND	0.50	µg/L	1.0		11/8/05
Toluene	ND	0.50	µg/L	1.0		11/8/05
Ethylbenzene	ND	0.50	µg/L	1.0		11/8/05
m,p-Xylene	0.67	0.50	µg/L	1.0		11/8/05
o-Xylene	41	10	µg/L	20		11/8/05
Surrogate: Cis-1,2-Dichloroethylene	91.5	85-115	% Rec	1.0		11/8/05

Test Name: TPH as Gasoline Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,700	50	µg/L	1.0		11/8/05

Client Sample ID: MW-19 Received: 11/1/05 Collected: 11/1/05 13:05
Lab ID: 0511014-05D

Test Name: TPH as Diesel Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	320	50	µg/L	1.0	11/8/05	11/9/05
Surrogate: N-Tricosane	102	70-130	% Rec	1.0	11/8/05	11/9/05

Date: 14-Nov-05
WorkOrder: 0511014

ANALYTICAL REPORT

Client Sample ID: MW-19
Lab ID: 0511014-05F

Received: 11/1/05

Collected: 11/1/05 13:05

Test Name: Aromatic Volatiles

Reference: EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	1.0	µg/L	1.0		11/8/05
Toluene	ND	1.0	µg/L	1.0		11/8/05
Chlorobenzene	ND	1.0	µg/L	1.0		11/8/05
Ethylbenzene	ND	1.0	µg/L	1.0		11/8/05
m,p-Xylene	0.73	0.50	µg/L	1.0		11/8/05
o-Xylene	51	25	µg/L	50		11/8/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		11/8/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		11/8/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		11/8/05
Surrogate: Fluorobenzene	100	79.1-113	% Rec	1.0		11/8/05

Test Name: Halogenated Volatiles

Reference: EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Dichlorodifluoromethane	ND	2.0	µg/L	1.0		11/8/05
Chloromethane	ND	4.0	µg/L	1.0		11/8/05
Vinyl Chloride	ND	1.0	µg/L	1.0		11/8/05
Bromomethane	ND	4.0	µg/L	1.0		11/8/05
Chloroethane	ND	1.0	µg/L	1.0		11/8/05
Trichlorofluoromethane	ND	1.0	µg/L	1.0		11/8/05
1,1-Dichloroethene	ND	1.0	µg/L	1.0		11/8/05
Methylene Chloride	ND	1.0	µg/L	1.0		11/8/05
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		11/8/05
1,1-Dichloroethane	ND	1.0	µg/L	1.0		11/8/05
Chloroform	ND	1.0	µg/L	1.0		11/8/05
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		11/8/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		11/8/05
Carbon Tetrachloride	ND	1.0	µg/L	1.0		11/8/05
1,2-Dichloropropane	ND	1.0	µg/L	1.0		11/8/05
Trichloroethene	ND	1.0	µg/L	1.0		11/8/05
Bromodichloromethane	ND	1.0	µg/L	1.0		11/8/05
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		11/8/05
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		11/8/05
1,1,2-Trichloroethane	ND	1.0	µg/L	1.0		11/8/05
Dibromochloromethane	ND	1.0	µg/L	1.0		11/8/05
Tetrachloroethene	ND	1.0	µg/L	1.0		11/8/05
Chlorobenzene	ND	1.0	µg/L	1.0		11/8/05
Bromoform	ND	2.0	µg/L	1.0		11/8/05
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0		11/8/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		11/8/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		11/8/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		11/8/05
Surrogate: 2-Bromo-1-chloropropane	75.7	75.2-125	% Rec	1.0		11/8/05

Date: 14-Nov-05
WorkOrder: 0511014

ANALYTICAL REPORT

Client Sample ID: WP-2
Lab ID: 0511014-06A

Received: 11/1/05

Collected: 11/1/05 13:55

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		11/8/05
Benzene	ND	0.50	µg/L	1.0		11/8/05
Toluene	0.84	0.50	µg/L	1.0		11/8/05
Ethylbenzene	2.2	0.50	µg/L	1.0		11/8/05
m,p-Xylene	19	0.50	µg/L	1.0		11/8/05
o-Xylene	790	50	µg/L	100		11/8/05
Surrogate: Cis-1,2-Dichloroethylene	93.2	85-115	% Rec	1.0		11/8/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	42,000	5,000	µg/L	100		11/8/05

Client Sample ID: WP-2

Received: 11/1/05

Collected: 11/1/05 13:55

Lab ID: 0511014-06D

Test Name: TPH as Diesel/Motor Oil

Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	2,600	50	µg/L	1.0	11/10/05	11/11/05
TPHC Motor Oil	1,100	170	µg/L	1.0	11/10/05	11/11/05

Client Sample ID: MW-21

Received: 11/1/05

Collected: 11/1/05 13:45

Lab ID: 0511014-07A

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		11/7/05
Benzene	ND	0.50	µg/L	1.0		11/7/05
Toluene	ND	0.50	µg/L	1.0		11/7/05
Ethylbenzene	ND	0.50	µg/L	1.0		11/7/05
m,p-Xylene	ND	0.50	µg/L	1.0		11/7/05
o-Xylene	ND	0.50	µg/L	1.0		11/7/05
Surrogate: Cis-1,2-Dichloroethylene	85.7	85-115	% Rec	1.0		11/7/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		11/7/05

Date: 14-Nov-05
WorkOrder: 0511014

ANALYTICAL REPORT

Client Sample ID: MW-21 Received: 11/1/05 Collected: 11/1/05 13:45
Lab ID: 0511014-07D

Test Name: TPH as Diesel Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	11/8/05	11/9/05
Surrogate: N-Tricosane	88.8	70-130	% Rec	1.0	11/8/05	11/9/05

Client Sample ID: MW-22 Received: 11/1/05 Collected: 11/1/05 14:25
Lab ID: 0511014-08A

Test Name: BTEX Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		11/8/05
Benzene	ND	0.50	µg/L	1.0		11/8/05
Toluene	ND	0.50	µg/L	1.0		11/8/05
Ethylbenzene	ND	0.50	µg/L	1.0		11/8/05
m,p-Xylene	ND	0.50	µg/L	1.0		11/8/05
o-Xylene	ND	0.50	µg/L	1.0		11/8/05
Surrogate: Cis-1,2-Dichloroethylene	85.2	85-115	% Rec	1.0		11/8/05

Test Name: TPH as Gasoline Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		11/8/05

Client Sample ID: MW-22 Received: 11/1/05 Collected: 11/1/05 14:25
Lab ID: 0511014-08D

Test Name: TPH as Diesel Reference: EPA 3510/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Diesel (C12-C22)	57	50	µg/L	1.0	11/8/05	11/9/05
Surrogate: N-Tricosane	99.5	70-130	% Rec	1.0	11/8/05	11/9/05

North Coast Laboratories, Ltd.

Date: 15-Nov-05

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT

Method Blank

Sample ID: MB 110705	Batch ID: R37931	Test Code: 8010W	Units: µg/L	Analysis Date: 11/7/05 7:32:47 PM			Prep Date:					
Client ID:		Run ID: ORG C1_051107C		SeqNo:	546071							
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	HighLimit	LowLimit	RPD Ref Val	% RPD	RPDLimit	Qual
Dichlorodifluoromethane		1.121	2.0									J
Chloromethane		ND	4.0									
Vinyl Chloride		ND	1.0									
Bromomethane		ND	4.0									
Chloroethane		ND	1.0									
Trichlorofluoromethane		ND	1.0									
1,1-Dichloroethene		ND	1.0									
Methylene Chloride		ND	1.0									
trans-1,2-Dichloroethene		ND	1.0									
1,1-Dichloroethane		ND	1.0									
Chloroform		ND	1.0									
1,1,1-Trichloroethane		ND	1.0									
1,2-Dichloroethane		ND	1.0									
Carbon Tetrachloride		ND	1.0									
1,2-Dichloropropane		ND	1.0									
Trichloroethene		ND	1.0									
Bromodichloromethane		ND	1.0									
cis-1,3-Dichloropropene		ND	1.0									
trans-1,3-Dichloropropene		ND	1.0									
1,1,2-Trichloroethane		ND	1.0									
Dibromochloromethane		ND	1.0									
Tetrachloroethene		ND	1.0									
Chlorobenzene		ND	1.0									
Bromoform		ND	2.0									
1,1,2,2-Tetrachloroethane		ND	1.0									
1,3-Dichlorobenzene		ND	1.0									
1,4-Dichlorobenzene		ND	1.0									
1,2-Dichlorobenzene		ND	1.0									

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT

Method Blank

Sample ID:	MB 110705	Batch ID:	R37923	Test Code:	8020W	Units:	µg/L	Analysis Date:	11/17/05 7:32:47 PM	Prep Date:		
Client ID:				Run ID:	ORG C1_051107B			SeqNo:	545970			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Benzene		ND	1.0									
Toluene		ND	1.0									
Chlorobenzene		ND	1.0									
Ethylbenzene		ND	1.0									
m,p-Xylene		ND	0.50									
o-Xylene		ND	0.50									
1,3-Dichlorobenzene		ND	1.0									
1,4-Dichlorobenzene		ND	1.0									
1,2-Dichlorobenzene		ND	1.0									
Fluorobenzene		0.990	0.10	1.00		0	99.0%		79	113	0	
Sample ID:	MB-1117/05	Batch ID:	R37915	Test Code:	BTXEW	Units:	µg/L	Analysis Date:	11/17/05 10:11:51 PM	Prep Date:		
Client ID:				Run ID:	ORG C8_051107B			SeqNo:	545894			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
MTBE		ND	3.0									
Benzene		ND	0.50									
Toluene		0.1410	0.50									J
Ethylbenzene		ND	0.50									
m,p-Xylene		0.2434	0.50									J
o-Xylene		ND	0.50									
Cis-1,2-Dichloroethylene		0.892	0.10	1.00		0	89.2%		85	115	0	
Sample ID:	MB-1117/05	Batch ID:	R37914	Test Code:	TPHC GW	Units:	µg/L	Analysis Date:	11/17/05 10:11:51 PM	Prep Date:		
Client ID:				Run ID:	ORG C8_051107A			SeqNo:	545879			
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Gas (C6-C14)		16.98	50									J

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Method Blank

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

Sample ID: MB-14606	Batch ID: 14606	Test Code: TPHDIW	Units: µg/L	Analysis Date: 11/9/05 5:57:26 PM				Prep Date: 11/8/05				
Client ID:		Run ID: ORGCT_051109A		SeqNo:					SeqNo:	546461		
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Diesel (C12-C22)		ND	50	0	0	83.0%	70	130	0	0		
N-Tricosane		41.5	0.10	50.0	0							
Sample ID: MB-14621	Batch ID: 14621	Test Code: TPHDIMW	Units: µg/L	Analysis Date: 11/11/05 12:37:43 AM				Prep Date: 11/10/05				
Client ID:		Run ID: ORGCT_051110B		SeqNo:					SeqNo:	547011		
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Diesel (C12-C22)		ND	50	ND	170							
TPHC Motor Oil		ND	ND									

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 15-Nov-05

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT
Laboratory Control Spike

Sample ID: LCS-05709	Batch ID: R37931	Test Code: 8010W	Units: µg/L	Analysis Date: 11/7/05 5:40:53 PM			Prep Date:			
Client ID:		Run ID: ORGC1_051107C								
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	% RPD	RPD Limit	Qual
Dichlorodifluoromethane	5.656	2.0	5.00	0	113%	50	149	0		
Chloromethane	5.422	4.0	5.00	0	108%	61	155	0		
Vinyl Chloride	4.734	1.0	5.00	0	94.7%	64	141	0		
Bromomethane	4.882	4.0	5.00	0	97.6%	80	142	0		
Chloroethane	4.809	1.0	5.00	0	96.2%	81	129	0		
Trichlorofluoromethane	4.320	1.0	5.00	0	86.4%	76	136	0		
1,1-Dichloroethene	4.864	1.0	5.00	0	97.3%	78	131	0		
Methylene Chloride	5.065	1.0	5.00	0	101%	73	135	0		
trans-1,2-Dichloroethene	5.218	1.0	5.00	0	104%	78	125	0		
1,1-Dichloroethane	5.052	1.0	5.00	0	101%	78	119	0		
Chloroform	4.929	1.0	5.00	0	98.6%	82	114	0		
1,1,1-Trichloroethane	4.852	1.0	5.00	0	97.0%	79	119	0		
1,2-Dichloroethane	5.027	1.0	5.00	0	101%	78	117	0		
Carbon Tetrachloride	4.281	1.0	5.00	0	85.6%	70	129	0		
1,2-Dichloropropane	4.775	1.0	5.00	0	95.5%	80	119	0		
Trichloroethene	4.598	1.0	5.00	0	92.0%	80	119	0		
Bromodichloromethane	4.963	1.0	5.00	0	99.3%	80	120	0		
cis-1,3-Dichloropropene	5.315	1.0	5.00	0	106%	77	119	0		
trans-1,3-Dichloropropene	5.219	1.0	5.00	0	104%	78	121	0		
1,1,2-Trichloroethane	5.310	1.0	5.00	0	106%	85	116	0		
Dibromochloromethane	5.524	1.0	5.00	0	110%	75	131	0		
Tetrachloroethene	4.804	1.0	5.00	0	96.1%	79	115	0		
Chlorobenzene	4.475	1.0	5.00	0	89.5%	79	117	0		
Bromoform	5.191	2.0	5.00	0	104%	72	127	0		
1,1,2,2-Tetrachloroethane	4.991	1.0	5.00	0	99.8%	78	126	0		
1,3-Dichlorobenzene	5.018	1.0	5.00	0	100%	76	122	0		
1,4-Dichlorobenzene	4.752	1.0	5.00	0	95.0%	74	125	0		
1,2-Dichlorobenzene	4.606	1.0	5.00	0	92.1%	79	120	0		

Qualifiers:

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT

Laboratory Control Spike

2-Bromo-1-chloropropane	1.20	0.10	1.00	0	120%	75	125	0
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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: LCSID-05709	Batch ID: R37931	Test Code: 8010W	Units: µg/L	Analysis Date: 11/17/05 6:36:59 PM			Prep Date:					
Client ID:		Run ID: ORGC1_051107C		SeqNc:	546670							
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane	6.073	2.0	5.00	0	121%	50	149	5.66	7.12%	15		
Chloromethane	6.879	4.0	5.00	0	138%	61	155	5.42	23.7%	15	R	
Vinyl Chloride	4.633	1.0	5.00	0	92.7%	64	141	4.73	2.15%	15		
Bromomethane	6.087	4.0	5.00	0	122%	80	142	4.88	22.0%	15	R	
Chloroethane	5.238	1.0	5.00	0	105%	81	129	4.81	8.54%	15		
Trichlorodifluoromethane	4.650	1.0	5.00	0	93.0%	76	136	4.32	7.37%	15		
1,1-Dichloroethene	4.997	1.0	5.00	0	99.9%	78	131	4.86	2.71%	15		
Methylene Chloride	5.121	1.0	5.00	0	102%	73	135	5.07	1.10%	15		
trans-1,2-Dichloroethene	5.000	1.0	5.00	0	100%	78	125	5.22	4.28%	15		
1,1-Dichloroethane	5.230	1.0	5.00	0	105%	78	119	5.05	3.46%	15		
Chloroform	5.036	1.0	5.00	0	101%	82	114	4.93	2.14%	15		
1,1,1-Trichloroethane	4.594	1.0	5.00	0	91.9%	79	119	4.85	5.47%	15		
1,2-Dichloroethane	4.807	1.0	5.00	0	96.1%	78	117	5.03	4.48%	15		
Carbon Tetrachloride	4.968	1.0	5.00	0	99.4%	70	129	4.28	14.9%	15		
1,2-Dichloropropane	4.481	1.0	5.00	0	89.6%	80	119	4.78	6.35%	15		
Trichloroethene	4.823	1.0	5.00	0	96.5%	80	119	4.60	4.78%	15		
Bromodichloromethane	5.126	1.0	5.00	0	103%	80	120	4.96	3.24%	15		
cis-1,3-Dichloropropene	5.322	1.0	5.00	0	106%	77	119	5.32	0.138%	15		
trans-1,3-Dichloropropene	5.124	1.0	5.00	0	102%	78	121	5.22	1.84%	15		
1,1,2-Trichloroethane	4.842	1.0	5.00	0	96.8%	85	116	5.31	9.21%	15		
Dibromochloromethane	4.790	1.0	5.00	0	95.8%	75	131	5.52	14.2%	15		
Tetrachloroethene	4.229	1.0	5.00	0	84.6%	79	115	4.80	12.7%	15		
Chlorobenzene	4.680	1.0	5.00	0	93.6%	79	117	4.47	4.46%	15		
Bromoform	4.947	2.0	5.00	0	98.9%	72	127	5.19	4.83%	15		
1,1,2,2-Tetrachloroethane	4.209	1.0	5.00	0	84.2%	78	126	4.99	17.0%	15	R	
1,3-Dichlorobenzene	4.625	1.0	5.00	0	92.5%	76	122	5.02	8.15%	15		
1,4-Dichlorobenzene	5.040	1.0	5.00	0	101%	74	125	4.75	5.88%	15		
1,2-Dichlorobenzene	4.446	1.0	5.00	0	88.9%	79	120	4.61	3.55%	15		
2-Bromo-1-chloropropane	1.09	0.10	1.00	0	109%	75	125	1.20	9.48%	15		

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT
 Laboratory Control Spike

Sample ID: LCS-05709		Batch ID: R37923		Test Code: 8020W		Units: µg/L		Analysis Date: 11/7/05 5:40:53 PM		Prep Date:		
Client ID:		Run ID:		ORGC1_051107B				SeqNo:		545968		
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene		4.882	1.0	5.00	0	97.6%	82	109	0	0		
Toluene		4.880	1.0	5.00	0	97.6%	79	110	0	0		
Chlorobenzene		4.907	1.0	5.00	0	98.1%	78	115	0	0		
Ethylbenzene		4.888	1.0	5.00	0	97.8%	80	110	0	0		
m,p-Xylene		2.438	0.50	2.50	0	97.5%	80	110	0	0		
o-Xylene		2.427	0.50	2.50	0	97.1%	80	110	0	0		
1,3-Dichlorobenzene		4.968	1.0	5.00	0	99.4%	80	110	0	0		
1,4-Dichlorobenzene		5.031	1.0	5.00	0	101%	82	109	0	0		
1,2-Dichlorobenzene		5.004	1.0	5.00	0	100%	81	111	0	0		
Fluorobenzene		1.00	0.10	1.00	0	100%	79	113	0	0		
Sample ID: LCSD-05709		Batch ID: R37923		Test Code: 8020W		Units: µg/L		Analysis Date: 11/7/05 6:36:59 PM		Prep Date:		
Client ID:		Run ID:		ORGC1_051107B				SeqNo:		545969		
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene		4.944	1.0	5.00	0	98.9%	82	109	4.88	1.27%	15	
Toluene		4.931	1.0	5.00	0	98.6%	79	110	4.88	1.04%	15	
Chlorobenzene		4.927	1.0	5.00	0	98.5%	78	115	4.91	0.398%	15	
Ethylbenzene		4.921	1.0	5.00	0	98.4%	80	110	4.89	0.667%	15	
m,p-Xylene		2.443	0.50	2.50	0	97.7%	80	110	2.44	0.232%	15	
o-Xylene		2.427	0.50	2.50	0	97.1%	80	110	2.43	0.0204%	15	
1,3-Dichlorobenzene		4.922	1.0	5.00	0	98.4%	80	110	4.97	0.931%	15	
1,4-Dichlorobenzene		4.945	1.0	5.00	0	98.9%	82	109	5.03	1.73%	15	
1,2-Dichlorobenzene		4.847	1.0	5.00	0	96.9%	81	111	5.00	3.18%	15	
Fluorobenzene		1.00	0.10	1.00	0	100%	79	113	1.00	0.135%	15	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT
 Laboratory Control Spike

Sample ID: LCS-05712		Batch ID: R37915		Test Code: BTXEW		Units: µg/L		Analysis Date: 11/7/05 6:10:26 PM		Prep Date:		
Client ID:				Run ID:	ORG C8_051107B	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
MTBE		37.92	3.0	40.0	0	94.8%	85	115				
Benzene		4.806	0.50	5.00	0	96.1%	85	115				
Toluene		4.813	0.50	5.00	0	96.3%	85	115				
Ethylbenzene		4.707	0.50	5.00	0	94.1%	85	115				
m,p-Xylene		9.223	0.50	10.0	0	92.2%	85	115				
o-Xylene		4.674	0.50	5.00	0	93.5%	85	115				
Cis-1,2-Dichloroethylene		1.10	0.10	1.00	0	110%	85	115				
Sample ID: LCSD-05712		Batch ID: R37915		Test Code: BTXEW		Units: µg/L		Analysis Date: 11/7/05 6:45:09 PM		Prep Date:		
Client ID:				Run ID:	ORG C8_051107B	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
MTBE		37.42	3.0	40.0	0	93.5%	85	115	37.9	1.34%	15	
Benzene		4.809	0.50	5.00	0	96.2%	85	115	4.81	0.0578%	15	
Toluene		4.806	0.50	5.00	0	96.1%	85	115	4.81	0.139%	15	
Ethylbenzene		4.762	0.50	5.00	0	95.2%	85	115	4.71	1.16%	15	
m,p-Xylene		9.404	0.50	10.0	0	94.0%	85	115	9.22	1.95%	15	
o-Xylene		4.750	0.50	5.00	0	95.0%	85	115	4.67	1.62%	15	
Cis-1,2-Dichloroethylene		1.10	0.10	1.00	0	109%	85	115	1.10	0.450%	15	
Sample ID: LCS-05713		Batch ID: R37914		Test Code: TPHC GW		Units: µg/L		Analysis Date: 11/7/05 7:54:15 PM		Prep Date:		
Client ID:				Run ID:	ORG C8_051107A	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
Analyte		Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Gas (C6-C14)		469.9	50	500	0	94.0%	85	115				

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

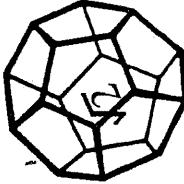
CLIENT: Green Diamond Resource Company
Work Order: 0511014
Project: 093047, Smith River

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:
LCSD-05713	R37914	TPHC GW	µg/L	11/7/05 8:28:40 PM	
Client ID:	Run ID:	ORG C8_051107A		SeqNo:	545877
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
TPHC Gas (C6-C14)	480.9	50	500	0	96.2%
Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:
LCS-14606	14606	TPHD IW	µg/L	11/9/05 3:58:12 PM	11/8/05
Client ID:	Run ID:	ORG C7_051109A		SeqNo:	546459
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
TPHC Diesel (C12-C22) N-Tricosane	744.5 62.4	50 0.10	500 50.0	0 0	149% 125%
Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:
LCSD-14606	14606	TPHD IW	µg/L	11/9/05 4:18:08 PM	11/8/05
Client ID:	Run ID:	ORG C7_051109A		SeqNo:	546460
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
TPHC Diesel (C12-C22) N-Tricosane	705.9 66.7	50 0.10	500 50.0	0 0	141% 133%
Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:
LCS-14621	14621	TPHD MMW	µg/L	11/12/05 6:35:40 PM	11/10/05
Client ID:	Run ID:	ORG C7_051110B		SeqNo:	547034
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
TPHC Diesel (C12-C22) TPHC Motor Oil	536.5 1,030	50 170	500 1,000	0 0	107% 103%
Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:
LCSD-14621	14621	TPHD MMW	µg/L	11/12/05 6:56:08 PM	11/10/05
Client ID:	Run ID:	ORG C7_051110B		SeqNo:	547035
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec
TPHC Diesel (C12-C22) TPHC Motor Oil	527.2 1,101	50 170	500 1,000	0 0	105% 110%
Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank		
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits			

NORTH COAST
LABORATORIES LTD.



5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

PROJECT INFORMATION			
Project Number:	093947	Project Name:	Smith River
Purchase Order Number:			
LAB ID	SAMPLE ID	DATE	MATRIX
MW-6	11105	11/10/01	DW
WP-3		12/0/01	
MW-7		12/10/01	
WP-1		12/3/01	
MW-19		12/3/01	
WP-2		12/3/01	
MW-21		12/3/01	
MW-22		12/3/01	

LABORATORY NUMBER: <u>0511014</u>	
TAT: <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 5 Day <input type="checkbox"/> 5-7 Day <input checked="" type="checkbox"/> STD (2-3 Wk) <input type="checkbox"/> Other: _____	
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES	
REPORTING REQUIREMENTS: State Forms <input type="checkbox"/> Preliminary: FAX <input type="checkbox"/> Verbal <input type="checkbox"/> By: _____ Final Report: FAX <input type="checkbox"/> Verbal <input type="checkbox"/> By: _____	
CONTAINER CODES: 1—1/2 gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L CG; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other PRESERVATIVE CODES: a—HNO ₃ ; b—HCl; c—H ₂ SO ₄ ; d—Na ₂ S ₂ O ₃ ; e—NaOH; f—C ₂ H ₃ O ₂ Cl; g—other	
SAMPLE CONDITION/SPECIAL INSTRUCTIONS <u>- received 12/10/01 VOA ED labeled TRT-D-NV-JM should be TRT'd per Date to 12/11/01</u>	
SAMPLE DISPOSAL <input checked="" type="checkbox"/> NCL Disposal of Non-Contaminated <input type="checkbox"/> Return <input type="checkbox"/> Pickup	
CHAIN OF CUSTODY SEALS Y/N/NA SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand	

*MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT